QUARTERLY REPORT ON THE EURO AREA

Volume 7 N° 2 (2008)

Special report: EMU@10 - Assessing the first ten years and challenges ahead

EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR ECONOMIC AND FINANCIAL AFFAIRS

ISSN 1725-575-9

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EDITORIAL

At the beginning of May 1998, European Union leaders took the historic decision to move to the Third Stage of Economic and Monetary Union and introduce the euro on 1 January 1999. Ten years later, EMU is one of the greatest achievements of EU integration with 320 million European citizens from Helsinki to Dublin and from Lisbon to Nicosia sharing the same currency and enjoying its numerous benefits.

To mark this occasion, the European Commission presented a Communication and accompanying report, 'EMU@10: Successes and challenges after 10 years of Economic and Monetary Union', that reviews the experience of the first decade of EMU and looks at its future. Exceptionally, this Quarterly Report on the Euro Area is entirely devoted to EMU@10.

The first decade of the euro shows that EMU is a resounding success. It has helped to deliver macroeconomic stability through a sound single monetary policy and much improved fiscal behaviour in member countries. It has ushered in an unprecedented period of price stability and low interest rates, bringing substantial savings for consumers and business. The single currency has also supported trade and investment and deepened financial integration. Economies in the euro area have become more integrated, better synchronised, better managed and more flexible in the last 10 years.

The combination of enhanced stability, deeper integration and structural reforms has also had a striking impact on the labour market. Sixteen million jobs have been created since 1999, a much greater number than in the decade before and more than in the United States during the same period. As a consequence, the unemployment rate fell to 7% in 2007, its lowest level in 15 years.

Can EMU deliver further benefits in the future? Undoubtedly, yes. Its full potential for citizens and business has not yet been realised. Although there have been significant, and persistent, differences across euro-area countries, overall productivity growth in the euro area has been disappointing compared with the performance registered in other developed economies. While lower-than-expected productivity growth cannot be directly attributed to the euro, it reflects a backlog in structural reform in many Member States of the euro area. The euro has not so far been enough of a catalyst for structural reforms. With more decisive steps to modernise euro-area economies and make them more competitive, building on those already taken under the EU's Lisbon Strategy for Growth and Jobs, the euro area should be able to take even greater advantage of the single currency. Member States must both be more ambitious and honour their commitments by adopting reforms that will unleash the potential of their economies in terms of jobs and growth and by promoting more competitive services markets – including financial markets – and better-functioning labour markets. These efforts are particularly necessary in EMU because, in the absence of national monetary and exchange rate policy, the onus of adjustment to country-specific shocks rests mainly on the flexibility of product and labour markets and on developed and well-functioning financial markets.

In addition, new and pressing challenges that were not apparent when EMU was devised have emerged. Globalisation, demographic change, higher energy and food prices and climate change are putting further strains on the growth potential of the euro-area economy and threaten price stability. Also the current financial turmoil is a manifestation of how shocks are transmitted in the global economy. Moreover, the progressive enlargement of the euro area will make economic structures in the euro area increasingly diverse, requiring effective and smooth intra-area adjustment. A more resilient economy will also be necessary in view of the unwinding of global imbalances which may have a highly asymmetric impact among euro-area economies.

These challenges demand that we swiftly improve further the functioning of EMU for the next decade and beyond in order to make the euro-area economy more adaptable and dynamic. In order to prepare EMU for the future, the Commission has presented a three-pillar policy agenda in its EMU@10 Communication and Report, based on a domestic pillar, an external pillar and initiatives to strengthen EMU's economic governance.

The domestic pillar of the policy agenda includes two strands. First, fiscal surveillance in EMU must be deepened. The effectiveness of the preventive arm of the Stability and Growth Pact must be improved in order to ensure sound fiscal behaviour over the whole cycle. Second, macroeconomic surveillance and the coordination of economic policies must be deepened and broadened in order to deal with the damage that persisting macroeconomic imbalances may inflict on a country's competitiveness and growth potential. It is also important to identify risks linked to financial stability early on, so that they can be addressed before they become entrenched. The pace at which our economies are modernised and barriers between them broken down needs to be stepped up. This will help adjust the euro area to changing conditions and weather external shocks.

The second pillar relates to the external agenda. The euro is already the second most important currency in the world, so there is a strong case for the euro area to increase its presence in the global arena. The euro-area members must be able to define, agree and then stick to common positions, to be able to speak with a single voice in international fora such as the International Monetary Fund. Only then will the euro be able fully to play its role as a major international currency in shaping the international economy.

Finally, the third pillar of the policy agenda aims at improving EMU's governance. The current set of institutions and instruments which govern EMU is sound. But we can make better use of them to tackle emerging policy challenges. National economic and budgetary policies are a matter of common concern, so those policies need to be better coordinated within the Eurogroup and the ECOFIN. These two fora should capitalise on their respective forces and complement each other more fully. The ECOFIN Council should be firmly at the centre of our system of governance, integrating issues related to EMU in its work, whereas the Eurogroup will continue to be an important forum for frank exchanges among EMU members beyond this first decade.

This 10th anniversary of EMU is also a special date for me personally, as I will be leaving DG ECFIN after 7 years as Director-General. Having already worked on the preparations for EMU in Germany, it was a real privilege for me to work on managing and developing its operational framework during my time here at DG ECFIN. While my stay at the Commission has seen many challenges for EMU, it has been deeply rewarding for me to see the great strides monetary union has made in its functioning and how powerfully the euro has emerged as an international currency. I am confident that the next decade of EMU will be equally rich in achievement.

I have also had the pleasure of observing the successful evolution of the Quarterly Report on the Euro Area (QREA) since its birth in March 2002, only months after my arrival in DG ECFIN in 2001. I have seen it grow in depth, substance and analytical rigour to occupy a prominent place in the public debate on EMU's economic policy. I believe that the Quarterly Report on the Euro Area has made a significant contribution towards disseminating ECFIN's analytical work and views on many important empirical debates surrounding economic policy in the euro area.

Klaus REGLING
DIRECTOR GENERAL

EMU@10

I. The first ten years: a resounding success

After a decade of preparations, the decision to move to the final stage of EMU was taken in early May 1998, and on 1 January 1999 the euro became the official currency in eleven EU member countries, followed by four members in later years. Ten years on, the time is ripe for a first comprehensive assessment of how it is functioning. Drawing extensively on the European Commission Report 'EMU@10: Successes and challenges after 10 years of Economic and Monetary Union', the overall findings suggest that EMU has been a resounding success. It has secured macroeconomic stability – supported by sound monetary policy and much improved fiscal behaviour in member countries – and boosted cross-border trade, financial integration, investment and employment. It has also brought significant benefits to euro-area member countries engaged in catching-up and has established the euro as the world's second international currency. It has nevertheless exhibited some weaknesses, as productivity growth has been below that of other developed economies while there have been substantial and persistent differences in macroeconomic performance across countries. This down side is not attributable to the euro per se but rather reflects both a backlog in structural reform in several member countries and an insufficient awareness of the policies required to ensure that a single currency area functions smoothly.

On 1 January 1999, eleven EU Member States – Belgium, Germany, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland – adopted the European Union's single currency, the euro, in what may be considered to be the world's most radical monetary reform since Bretton Woods.[1] This move established the second largest single currency area in the world (after the United States), which now produces two thirds of the EU's GDP and one fifth of the world's. Four other EU Member States have joined the euro area since its inception: Greece in 2001, Slovenia in 2007 and Cyprus and Malta in 2008. The area is set to expand further as most EU Member States currently outside the euro area are preparing to join at some point in the future.[2]

The establishment of a single currency for the EU – and the creation of the European Central Bank (ECB) – was a leap forward in the process of European economic integration. Although the origins of the single currency go back to the 1970s, the process accelerated in the early 1990s when the lifting of the Iron Curtain and the ensuing political uncertainties prompted the perception that stronger common goal-setting in the EU was needed. This eventually led to the go-ahead for economic and monetary union, as laid down in the Maastricht Treaty signed in 1992. From then onwards EU members willing to join the euro area in the first wave engaged in a process of convergence towards the reference values enshrined in the Treaty regarding price stability, exchange rate stability, interest rates, government net borrowing and government indebtedness.[3] Eventually the eleven countries mentioned above qualified for participation in the first wave.

In its first ten years, the euro-area economy went through approximately a full business cycle, moving from the peak of the cycle at the advent of the euro to its trough in the wake of the dotcom bust, followed by a first slow and then decisive recovery. This makes it easier to avoid

[1] The assessment draws on Part I of European Commission (2008), 'EMU@10, Successes and challenges after 10 years of Economic and Monetary Union', European Economy, No. 2, 2008, which includes a Commission Communication and an analytical report by the Commission Services. It draws also on a number of papers written by external and Commission economists, published in a dedicated series of ECFIN Economic Papers.

These documents are available at: http://www.ec.europa.eu/economy_finance/emu10/index_en.htm

[2] All the EU countries currently not in the euro area, apart from Denmark and the United Kingdom, which have opted out of the single currency, are committed to join the euro area once they fulfil the convergence criteria established in the Treaty.

[3] Specifically, in order to qualify a country needed to satisfy the following criteria: inflation not exceeding by more than 1 1/2 pp that of the three best-performing Member States in terms of price stability, and a sustainable price performance; long-term interest rates not exceeding by more than 2 pp that of the three best-performers on this measure; not being subject to a Council Decision on an excessive deficit; and observing the normal fluctuation margins of the ERM without severe tensions for at least two years.

wrongly attributing observed economic tendencies to permanent, as opposed to cyclical, developments. However, the assessment is complicated by the fact that many of the changes in governance structures and policy orientations prompted by the single currency were already ongoing in the run-up phase, including – importantly – the pursuit of the Maastricht convergence criteria. Moreover, many participating countries were clearly not entering the euro area under 'steady state' conditions, but were still grappling with past economic disturbances.

1. Initial goals and expectations

Aside from the political motivations for the creation of a single currency for the EU, the euro was intended to serve a number of economic goals, which can be grouped under the following three headings:

- *Macroeconomic stability*. The single currency was in part a response to past episodes of excessive exchange rate, output and inflation volatility. The underutilisation of resources stemming from high macroeconomic volatility was deemed to be costly in terms of both efficiency and equity – and hence its removal beneficial.

- *Growth and jobs*. The single currency was deemed to be a decisive move towards the completion of the European single market established in 1992. The reduction in transaction costs and risk premiums associated with the single currency were expected to boost intra-area trade and finance. As the exchange rate risks and currency transaction cost would diminish or disappear, a better use of scarce resources could be achieved, not least because greater transparency would foster competition.

- *Cohesion and convergence*. It was expected that closer integration would boost real economic convergence towards the best-performers. Moreover, as economies would become more similar, policies would become easier to co-ordinate as the importance of national desiderata diminished.

Before it was created there was a lively academic and political debate on the viability or desirability of an economic and monetary union for the EU. There was a very broad spectrum of views on the subject: some predicted a bumpy start or even collapse, while others were more sanguine. However, many tended towards a pessimistic view. The assessments in the early years were also coloured by the global economic downturn in the early 2000s and the depreciation of the euro against the US dollar in the period 1999-2002, both roughly coinciding with the run-up to and introduction of euro coins and notes in 2002. This is in contrast with the assessment in this section, from which emerges a predominantly favourable picture of the first ten years of the euro – even if weaknesses, shortcomings and unfinished business are also highlighted.

But even its fiercest proponents saw the creation and management of the single currency as a major challenge, essentially for the following two reasons:

- *First*, the European Economic and Monetary Union (EMU) is unique in that it comprises a single currency and monetary policy in combination with fiscal policies conducted at national level – albeit within a common framework – by its participating Member States. This is unlike federal monetary unions, like the United States, where a federal government is endowed with sovereignty to tax and to provide common public goods. The US federal budget acts as a stabiliser, enabling fiscal transfers to automatically flow from booming to slumping states, whereas the euro area has no such transfer mechanism.

- *Second*, alternative mechanisms of adjustment in the euro area were deemed to be comparatively weak. Low labour mobility within and across borders, weak responsiveness of prices and wages to the business cycle, and the limited degree of integration of financial markets – along with the absence of cross-border fiscal transfers – were considered to create a risk of tensions between participating countries building up if their economies failed to move in sync. In such an environment the loss of the possibility of exchange rate adjustment could prove costly and the effectiveness of the single monetary policy – which by its nature could only be geared towards the needs of the area as a whole – questionable.

The use of fiscal policies to stabilise the national economies was seen as possible to some extent, but the experience of previous decades had given rise to growing scepticism. Indeed, from the outset it was recognised that countries would be tempted to 'free ride' in the absence of the disciplining effect of exchange-rate risk premiums, by running budget deficits while neglecting longer-term considerations of fiscal sustainability. The adverse effects of fiscal profligacy would be all the more damaging as they risked spilling over, thus inflicting instability onto the area and squeezing productive capital formation in other participating countries. It would also hinder the newly created ECB in doing its job of maintaining price stability and by extension, macroeconomic stability.

These concerns led to the development of the convergence criteria for inflation, exchange rate stability, interest rates and public deficits and debt, which were enshrined in the 1992 Maastricht Treaty, and which countries must comply with to qualify for euro-area accession. It also led to the adoption of the Stability and Growth Pact (SGP) in 1997 which fixes rules for fiscal policy and penalties if those rules are breached. Concretely, countries are required to move towards and sustain a fiscal position 'close to balance or in surplus' over the medium term and will be subject to corrective measures if the fiscal deficit exceeds 3% of GDP and/or if public debt fails to converge towards or below 60% of GDP, unless 'special circumstances' can be demonstrated. Participating countries submit annually a Stability Programme which contains a record of current and planned fiscal outcomes and on which the assessment of compliance by the competent EU authorities (the European Commission and the Ecofin Council) is based.

The concerns over the weak adjustment capacity of the countries participating in the euro area also led to a growing role for the EU's Lisbon Strategy, which was adopted in 2000 to orchestrate structural reforms in product, labour and financial markets. While the Strategy was designed to boost growth and jobs over the longer haul in the whole EU, there has been mounting evidence that structural policies also have favourable knock-on effects on the capacity of the countries participating in the euro area to respond to adverse shocks. As well, the integration and development of financial markets was seen to create opportunities for risk sharing and consumption smoothing, thus easing the stabilisation role of macroeconomic policies. Structural reforms within the Lisbon Strategy therefore became instrumental to enhancing the adjustment capacity of the euro-area Member States – both present and future.

Against this backdrop, the sections below summarise the main findings with regard to the performance of the euro area, starting with the aggregate macroeconomic performance, followed by the record on cohesion and convergence, the conduct of macroeconomic policies, progress with structural reform and financial integration, the international role of the euro and the experience with the euro-area's economic governance.

2. Macroeconomic performance

Low and stable inflation

The European Central Bank (ECB) quickly established its credibility after the launch of the euro, laying the foundations for an environment of low and stable inflation. High inflation is potentially costly because it gives rise to an inflation risk premium embedded in long-term interest rates, blurs the price signals to consumers and producers and raises volatility in output and employment. The inflation performance of the euro area has decisively improved in comparison with previous decades, and this has been accompanied by greater stability also of GDP growth.

Disinflation in the euro area actually took off in the 1980s and was further reinforced in the 1990s as a result of the efforts to meet the Maastricht inflation criterion (Graph 1). Average inflation in the first ten years of the euro area was broadly on a par with the ECB's objective of price stability of close to but below 2%. And even though inflation is currently well above this mark due to hikes in energy and food prices, various gauges of long-term inflation expectations remain consistent with the price stability goal, suggesting that this goal is well anchored and credible.

Box 1: **Public perceptions of inflation in the euro area**

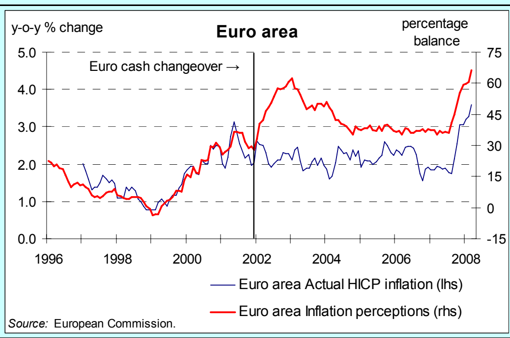
With the introduction of euro banknotes and coins in January 2002, the euro has become one of the most tangible symbols of European integration for the European citizens who use it. Since the introduction of euro cash, the European Commission has conducted regular opinion polls (Eurobarometer) to monitor citizens' attitudes towards the euro. These polls show that, overall, people support the single currency and that they adjusted fairly rapidly to it. They also show that citizens are aware of the benefits which the euro has brought – at least the microeconomic benefits such as the reduction of transaction costs, greater ease of travel and increased price transparency. On the other hand, the public remain more sceptical about the euro's positive impact on growth and employment and sound public finances.

The Eurobarometer shows that citizens take a more positive view of the usefulness of the euro for the EU as a whole than for their own country. Around two thirds consider the euro to be 'a good thing for Europe', but less than half consider it to be a 'good thing for their country'. When citizens are asked about the usefulness of the euro for their country, support rates are highest in Ireland, Luxembourg, Belgium and Slovenia and lowest in Greece, Germany, Italy and Portugal. In terms of socio-economic groups, men are on average more positive than women, younger more than older people and citizens with higher education and higher incomes more than those with lower education levels or lower income levels (Jonung and Conflitti (2008)).

Recent research carried out by the Commission services suggests that, aside from the socio-economic factors discussed above, popular support for the euro is correlated with inflation and, more specifically, perceptions thereof. Although there were on average no major price increases associated with the cash euro introduction, many citizens seem to hold a different view. Inflation perceptions, as measured by the European Commission's Consumer Surveys, increased significantly with the euro cash changeover in 2002 left panel of graph below).

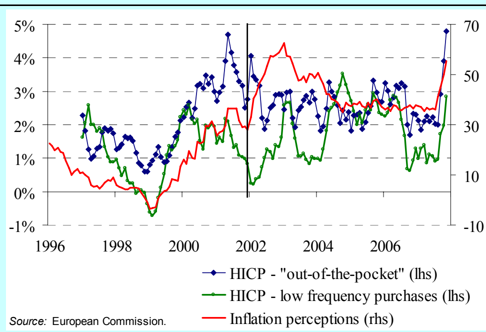
A number of factors have been identified which could explain the perception gap in the euro-area countries. These include the relatively high price increases for frequently purchased goods (such as food or energy – see right panel of graph below), the steep increase in house prices in many countries, low increases in disposable income and various psychological factors (see Döhring and Mordonu (2007)). The perception gap must also be seen against the rather low awareness of the actual inflation rate. According to the latest Flash Eurobarometer results, two thirds of the respondents in the euro area either had a too high estimate of the actual inflation rate or admitted that they had no idea what it was. This gap remains a challenge for researchers to interpret although it is expected to diminish over time.

Actual inflation and inflation perceptions, euro area



Sources: Commission services.

Possible determinants of inflation perceptions, euro area



Sources: Commission services.

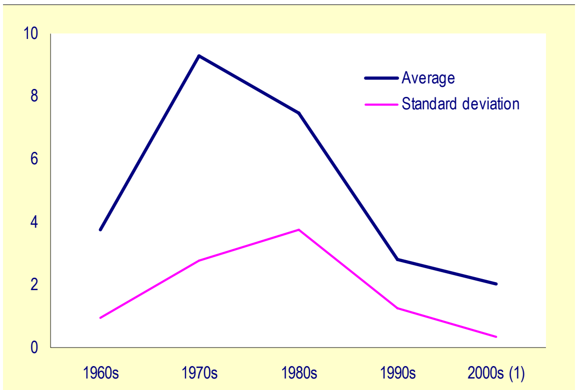
References:

Döhring, B. and A. Mordonu (2007), 'What drives inflation perceptions? A dynamic panel data analysis', European Commission, *European Economy – Economic Paper,* No. 284, July.

Jonung, L. and C. Conflitti (2008), 'Is the euro advantageous? Does it foster European feelings? Europeans on the euro after five years', *European Economy – Economic Papers*, No. 313, March

The long-term decline in inflation has been observed also in other developed countries: the euro area is not unique in this respect. Even so, the institutional changes that have accompanied the creation of the single currency – such as the establishment of an independent central bank with a clear price stability mandate – have been instrumental in anchoring price developments in the euro area. Meanwhile, the drive towards lower global inflation has been accompanied by rather radical shifts in relative prices, with prices of frequently purchased local services in particular rising, while those of less frequently purchased big-ticket items and services that are globally traded steeply fell. This may help explain the rather negative perceptions of the euro in many participating countries as the introduction of euro notes and coins roughly coincided with this change in relative prices (Box 1).

Graph 1: **Inflation performance of the euro area**
(in %, decade averages and standard deviations)



(1) Corresponds to the period since the start of Stage III of EMU, of which the last 2 years are forecast values.
Source: Commission services.

Massive job creation…

Another tangible economic achievement in the first ten years of the euro area has been massive growth in employment – with the creation of 16 million jobs and the unemployment rate falling from 9% in 1999 to an estimated 7% in 2008. This has occurred in spite of growing numbers of people approaching or exceeding retirement age, which shows that labour market participation has soared. Indeed, job growth has by far outpaced that in other mature economies with generally more favourable demographics, including the United States (Table 1). However, it would be inappropriate to attribute this achievement solely to the economic conditions generated by the single currency, and there is indeed evidence that labour market reforms in the 1990s have facilitated the labour market participation of 'marginal' workers (e.g. with low skills or limited job histories). But it is unlikely that the job gains would have been as impressive under the more volatile monetary conditions and fiscal instability that used to prevail under the previous system.

Table 1: **Growth and employment**
(average annual changes in %)

	1989-1998	1999-2008
Euro area		
Real GDP	2.2	2.1
Real GDP per capita	1.9	1.6
GDP per capita level (index, US = 100)	73	72
Employment	0.6	1.3
Labour productivity	1.6	0.8
United States		
Real GDP	3.0	2.6
Real GDP per capita	1.8	1.6
Employment	1.5	1.0
Labour productivity	1.5	1.6

Source: Commission services, OECD.

…but weak productivity growth

On a more negative note, there has been a significant productivity slowdown, with growth in output per worker halving from 1½% in the period 1989-1998 to an estimated ¾% in 1999-2008 (Table 1). This is in sharp contrast with the more rapid pace of productivity growth observed in the United States. It largely explains why the euro area has seen its growth rate stalling at around 2% per annum, the same as in the preceding decade – despite a much faster growth in labour utilisation. Even so, there is evidence that the introduction of the single currency has favoured productivity as it has offered firms even greater opportunities to trade and specialise.[4] Without it, labour productivity would have been even weaker in the euro area than it has been. Moreover, on a per capita basis, output growth actually matched the US performance, although this means that the euro area's per capita income stalled at slightly over 70% of the US level. Obviously it is tempting to assume the recent jobs 'miracle' itself has caused the productivity slowdown. A trade-off between more jobs and productivity may indeed emerge if faster employment growth leads to a lower capital use

[4] The single-currency effect on productivity is estimated to be 5% in the long run. See Barrell, R. et al. (2008), 'The Impact of EMU on Growth and Employment', *European Economy – Economic Papers*, No. 318.

per worker and if greater numbers of low-skilled workers are employed. But this combined effect is found to be small, indeed tiny in comparison with the impact of the slow development and diffusion of new technologies and best work practices.[5] A number of euro-area countries are not yet fully reaping the benefits of the information technology revolution and the spurt in the global division of labour.

Stronger resilience

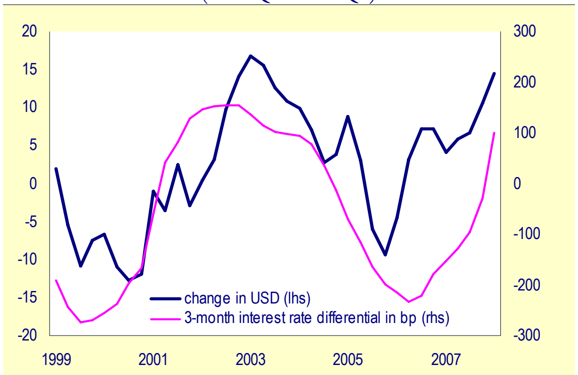
The euro area has historically tended to recover more slowly from economic downturns than the United States. The main culprit behind this lack of resilience is the comparatively greater rigidity of prices and wages in the euro area which inhibits a rapid adjustment of supply and demand towards equilibrium. However, the euro area's capacity to absorb adverse shocks has improved over the recent cycle, with the 2001-2003 downturn having been shallower than comparable episodes in previous cycles.[6] This is partly a reflection of a tendency towards smoother business cycles globally – the so-called 'Great Moderation' – possibly owing to better macroeconomic management, international risk sharing and consumption smoothing across the industrialised world. But the stability-oriented macroeconomic policy framework adopted by the euro area itself has undoubtedly helped.

Muted exchange rate volatility by historical standards

After the launch of the euro on 1 January 1999 the exchange rate quickly fell against other major currencies. Against the US dollar, it reached a low in June 2001, at USD 0.85 per euro. The exchange rate started to recover in mid-2002 and although the appreciation came to a temporary halt in 2005 it quickly resumed its upward trend, reaching a temporary high of close to USD 1.60 in March 2008.

While the appreciation partly reflects the widening interest differential vis-à-vis US short-term interest rates (Graph 2), it is also being driven by global imbalances, in particular the large deficit on the US current account and the associated surpluses in emerging economies (see Part II in this issue). A growing concern is that the exchange rate of the euro vis-à-vis the US dollar may now have appreciated beyond its fundamental value.

Graph 2: **The euro-dollar exchange rate and the short-term interest rate differential**
(1999Q1 -2008Q1)



Source: Commission services.

Overall, however, the volatility of the nominal effective exchange rates of the euro-area member economies has been relatively muted by historical standards. The greater stability associated with the disappearance of intra-area exchange rate realignments has been a key factor of increased resilience in the euro area.[7] Without the euro, the current episode of financial turbulence would undoubtedly have led to tensions in European exchange markets and associated instability.

3. Cohesion and convergence

Converging business cycles

One precondition for the favourable effects of EMU to materialise was always considered to be that the business cycles of the participant countries must be more or less in sync. Otherwise, the one-size-fits-all monetary policy would be less effective – i.e. too loose for buoyant economies and too tight for the others.

[5] For recent evidence see: Havik, K., K. McMorrow, W. Röger and A. Turrini (2008), 'The role of total factor productivity in explaining EU–US productivity differences: A macro, sectoral and industry level perspective', *European Economy — Economic Papers*, forthcoming.

[6] See European Commission (2007), 'The Resilience of the Euro-Area Economy', in *Quarterly Report on the Euro Area,* Vol. 6, No3, pp. 31-42.

[7] The standard deviation of the changes in the Member States nominal effective exchange rates has decreased steadily since the 1990s.

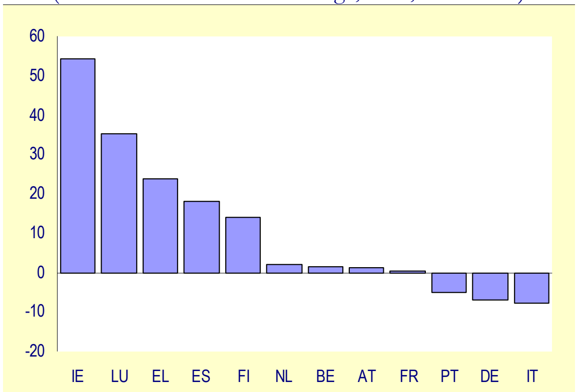
Analysis reported in Box 2 show that business cycles have become more synchronised between participating countries during the decade preceding the creation of the single currency – possibly driven by the establishment of the Single Market in 1992 and the joint policy efforts in the run-up to the euro. However, there have been no major further synchronisation gains since the single currency was created. In contrast, synchronisation between the euro area and the rest of the world has clearly accelerated. This suggests that the euro area as a whole has been moving more in step with an emerging global business cycle.

Despite the greater synchronisation of business cycles at higher frequencies, there is evidence of a more differentiated behaviour over the medium term. Two of the three largest countries in the euro area (Germany and Italy) have posted considerably weaker growth than the average (Graph 3). In the case of Germany this reflects the fact that it still had to work off the consequences of unification and the associated real appreciation of its exchange rate. Hence, lower growth during the adjustment period laid the foundation for the current better economic performance. Italy's sluggish performance has been due to continued losses in competitiveness associated with weak productivity growth and an industrial structure that is particularly prone to competition from low-wage countries. By contrast, in the euro-area periphery a strong growth momentum had been building up prior to the introduction of the euro, owing to sharp declines in real interest rates along with successful structural reform and an associated strong growth potential.

Moreover, at the time of the admission to the euro area, several participating countries had not yet fully completed their catching-up towards EU average living standards. Three of the four 'cohesion countries' (Spain, Ireland and Greece) have since shown a strong growth performance, while the fourth (Portugal) has disappointed. The strong performers have been thriving on investment booms, spurred by capital inflows attracted by comparatively high rates of return, with the single currency and the integration of financial markets acting as a catalyst. The counterpart of this was, however, growing imbalances in the external accounts which will need to be addressed to ensure lasting growth. Key to the much weaker performance of Portugal has been the comparatively poor fiscal management, with the tax burden increasing while public expenditure has been growth-unfriendly – i.e. diverted away from productive public capital formation.

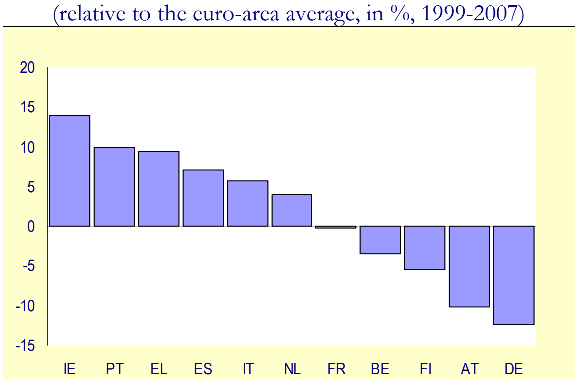
Overall, the divergences in growth and unit labour cost developments among the euro-area countries have been long-lasting, involving major shifts in intra-euro-area real effective exchange rates, which in some cases must have gone beyond their longer-term equilibrium values (Graph 4).

Graph 3: **Cumulated change in relative real GDP**
(relative to the euro-area average, in %, 1998-2007)



Source: Commission services.

Graph 4: **Cumulated change in relative unit labour cost**
(relative to the euro-area average, in %, 1999-2007)



Source: Commission services.

Box 2: Business cycle synchronisation

The conduct of a single monetary policy in EMU calls for a sufficient degree of business cycle synchronisation of the participating economies. The literature on the 'endogeneity of optimum currency areas' predicts that a single currency should boost trade integration which, along with financial market integration and the associated cross-country risk sharing, leads to more synchronised business cycles. Ten years after the launch of the euro sufficient time has elapsed to start examining whether the single currency has indeed led to business cycle synchronisation in the euro area. This question can be approached from two angles: by comparing the level of synchronisation in the euro area before and after the launch of the single currency or by comparing developments in intra-area and extra-area synchronisation.

The left-hand panel of the table below compares the mean intra-area correlation of growth in activity in the euro area before and after the creation of the euro. The analysis focuses on quarterly GDP and monthly industrial production (IP), which are complementary indicators. Given its historically close correlation with GDP and its availability at monthly frequency, most studies use the IP. On the other hand, the greater exposure of manufacturing to euro-area-wide common shocks may be a source of bias towards synchronisation across countries compared to the broader GDP measure.

The results show that the mean correlation of GDP growth between euro-area countries has increased from 0.56 in 1989-1998 to 0.60 in 1999-2008, although some caution is needed because the last six data points (2007Q3-2008Q4) used for the computations were still based on GDP forecasts. As to the IP-based correlations, which end in 2007M7, no reliable forecasts were available for the remainder of 2007 and 2008. Therefore the comparisons are based on the slightly truncated periods 1999M11-2007M7 and 1989M1-1997M7. However, given the earlier start of the IP data, it is possible to go back one more cycle and calculate mean euro-area correlation over the earlier reference period starting in mid-1978. The correlation between euro-area countries' IP cycles has risen considerably from the first period 1978-1986 (0.48) to the second period 1989-1997 (0.59), and has increased somewhat further to 0.61 in the post euro-period 1999-2007.

So even though correlation results may depend crucially on the chosen periods, the general picture is quite unambiguous: cross-country synchronisation in the euro area seems to have risen considerably between the late 1980s and the late 1990s, pointing to the effects of the internal market programme on trade and financial integration. Since the launch of the single currency in 1999, cross-country synchronisation has risen somewhat further, but not significantly so. Apparently the effect of lower trade barriers had already largely played itself out. Even so, the analysis does not support the view that the common currency might have promoted asymmetries between countries, be it through specialisation effects or divergent effects of common monetary impulses.

The right-hand panel of the table below compares the correlation of quarterly GDP growth between the euro area and the US, the UK and Japan in the two ten-year sub-periods before and after the launch of the euro. The euro area turns out to be significantly more closely aligned with the US, the UK and Japan since 1999 than during the previous ten-year period. Given the already very high level of intra-euro-area synchronisation prior to 1999 and the relatively minor further increase thereafter, the gap between intra- and extra-euro-area synchronisation has narrowed significantly. The closer euro-area affiliation of the UK is particularly marked, raising its correlation with the currency zone from practically zero prior to 1999 to 0.65 thereafter. The US and Japan, on the other hand, are still less synchronised with the euro area. The results of the table would therefore point to further 'Europeanisation' , possibly related to the internal market programme, rather than synchronisation effects stemming from the introduction of the euro. Additional synchronisation effects due to the monetary union's policy coordination framework and its impact on structural reforms may well be yet to come.

Mean intra-euro-area correlation in consecutive cycles

GDP	-	1989-1998	1999-2008
	-	0.56	0.60
Industrial production	1978-1986	1989-1997	1999-2007
	0.48	0.59	0.61

Sources: Commission services.

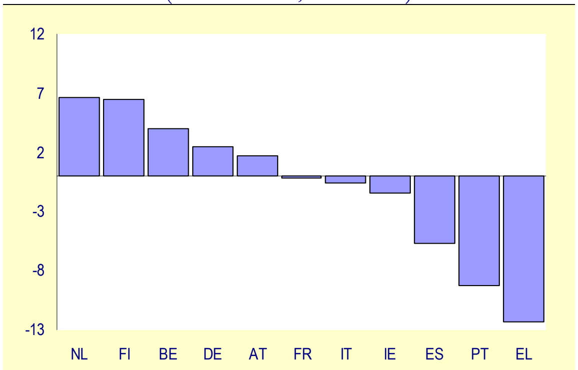
Euro-area correlation with outside countries (GDP)

	EA-JP	EA-UK	EA-US	Average	Intra-EA
1989-1998	0.46	0.06	-0.18	0.11	0.56
1999-2008	0.56	0.65	0.35	0.52	0.60

Sources: Commission services.

This has been reflected in divergent current-account positions across countries (Graph 5). Some, but not all, elements of these differences in inflation, growth and external positions can be attributed to structural convergence in living standards (real convergence). Even so, not all inflation differentials are harmful; some are merely a sign that competitiveness realignment is doing its job as an instrument of intra-area adjustment in the absence of exchange rates.[8] Better functioning labour and product markets have helped strengthen this channel (see Box 3) while the integration and development of financial markets have also helped smooth divergences by spreading their impact on broader groups of consumers and investors.

Graph 5: **Average current account positions** (in % of GDP, 1999-2007)



Source: Commission services.

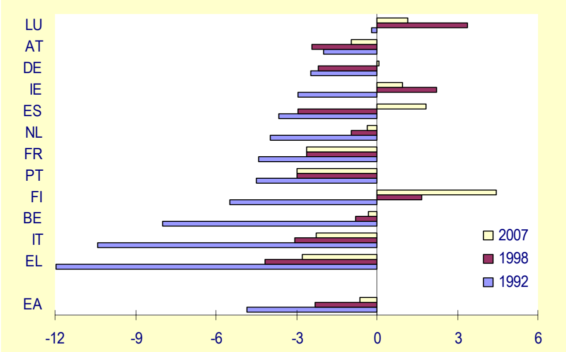
4. Macroeconomic policies

A positive experience overall

As noted, the adoption of the single currency implied a radical change in the macroeconomic policy framework. Monetary policy was henceforth centralised whereas fiscal policy remained in the remit of the participating countries, albeit subject to rules, surveillance and coordination at the EU level. The fiscal rules attributed a strong role to automatic fiscal stabilisers, which are powerful in the euro area owing to the extensive public social safety nets and progressive taxes. Meanwhile, fiscal policy behaviour should ensure budgets 'close to balance or in surplus' over the medium run. The Stability and Growth Pact, arguably the core of EMU's fiscal framework, was reformed in 2005, which reconfirmed and strengthened its 'corrective arm' after difficulties were experienced with its enforcement during the economic downturn of 2001-2003.

[8] See for extensive discussion of intra-area adjustment: European Commission (2006), 'The EU economy: 2006 Review – Adjustment dynamics in the euro area', *European Economy*, No. 6.

Graph 6: **Development of fiscal positions** (in % of GDP, 1992, 1998 and 2007)



Source: Commission services.

The experience with this policy framework has been positive overall. Monetary policy has been largely successful in broadly maintaining price stability and providing stimulus to activity when cyclical conditions were weak and removing those stimuli as the economy recovered. Notwithstanding recurrent difficulties in enforcing the fiscal rules in the early years of EMU, the budget deficits have declined significantly (Graph 6) – with the euro-area average deficit reaching 0.6% of GDP in 2007, the lowest level since the early 1970s.

Less fiscal ease in good times

Although fiscal policy has continued to be somewhat asymmetric, with a pro-cyclical easing in 'good times' followed by at best a neutral stance in 'bad times', this behaviour has become less widespread since the start of EMU than previously (see Box 4). Even so, asymmetric behaviour remains a matter of concern and the mechanisms underlying it appear to be rather complex.[9] The complicating factor is that fiscal policy suffers from long recognition lags regarding the actual cyclical position of the economy. For example, during the dotcom bubble in the early years of EMU, fiscal policy

[9] The reduction in the asymmetry of fiscal policy responses in EMU was first detected in the seminal paper by Galí, J. and R. Perotti (2003), 'Fiscal policy and monetary integration in Europe', *Economic Policy*, No. 18(37), pp. 533–572. Recent econometric work confirms this, see Turrini, A. (2008), 'Fiscal policy and the cycle in the euro area: The role of government revenue and expenditure', *European Economy – Economic Papers*, No. 323 and Von Hagen, J. and Ch. Wyplosz (2008), 'EMU's decentralized system of fiscal policy', *European Economy – Economic Papers*, No. 306.

Box 3: **Competitiveness as an adjustment mechanism in the euro area**

A crucial issue is how sensitive the euro area's internal real effective exchange rates are to the relative cyclical positions of the participating countries, whether this has changed with the introduction of the single currency and whether structural reform plays an additional role. Econometric tests were carried out for this purpose and comprise three steps.

In a first step, the year-on-year change in the real effective exchange rate (REER) was regressed on its own lag, its lagged level and the lagged output gap differential. The first two explanatory variables capture price rigidity and mean reversal effects, respectively. The third one measures the short-term price responsiveness to slack or excess demand. The regressions are based on annual data and include country fixed effects. A control for differences in income per-capita (low income countries should exhibit appreciating REERs) appeared insignificant. The results are shown in the table below. Separate estimations are reported for the periods 1970-2006 and 1999-2006 to measure the impact of the euro. The real exchange rate appears to react positively to differences between the domestic and rest-of-area output gap, indicating that competitiveness provides an effective channel of adjustment. The effect is non-negligible: an output gap higher (lower) by one percentage point compared with the rest of the euro area implies a REER appreciating (depreciating) by about half a percentage point per year. The real exchange rate is stable in the long run, owing to the negative and significant coefficient on the lagged REER. However, after 1999 the speed of adjustment of real effective exchange rates towards their equilibrium has slowed down with the irrevocable fixing of nominal exchange rates. This implies that inflation and output differentials in response to shocks have tended to become more persistent. This is obviously not surprising in view of the disappearance of the nominal internal exchange rates.

Real effective exchange rates and cyclical divergence: evidence from panel regressions

Dependent variable: ΔlogREER	1970 - 2006		1999 – 2006	
Estimation method	GLS	GMM	GLS	GMM
Explanatory variables:	(1)	(2)	(3)	(4)
ΔlogREER(-1)	0.205	0.238	-0.054	-0.162
	(4.40)***	(6.72)***	(0.61)	(1.58)
logREER(-1)	-0.122	-0.162	-0.049	-0.037
	(6.20)***	(5.03)***	(2.42)**	(1.77)*
Relative output gap(-1)	0.667	0.714	0.458	0.556
	(6.11)***	(5.87)***	(5.91)***	(9.58)***
Observations	385	374	99	99

Sources: Commission services.

In a second step (see table below) the regression was re-run on the relative GDP deflator (P) instead of the REER, while the change in the intra-area nominal effective exchange rate (NEER) was included as an explanatory variable (which is obviously zero from 1999 onwards). The purpose is to examine if the responsiveness of the relative GDP deflator increased with the launch of the euro. This appears to be the case across two dimensions (less inertia and stronger mean reversal), indicating that relative prices have assumed a stronger role in the adjustment. The response to the relative output gap is also stronger but the difference is not statistically significant. So, the 'pure' price effect (abstracting from the nominal effective exchange rate effect) suggests that the competitiveness channel has become stronger since the introduction of the single currency. While encouraging, this greater sensitivity of prices does not yet suffice to fully offset the loss of adjustment capacity through the more flexible nominal exchange rates.

'Pure' price competitiveness and cyclical divergence: evidence from panel regressions

Dependent variable: Δlog P	1970-2006		1999-2006	
Estimation method	GLS	GMM	GLS	GMM
Explanatory variables:	(1)	(2)	(3)	(4)
ΔlogP(-1)	0.626	0.546	0.11	0.182
	(20.69)***	(8.62)***	(1.22)	(2.18)**
logP(-1)	-0.017	-0.019	-0.063	-0.1
	(7.54)***	(2.87)***	(3.01)***	(2.78)***
Rel. output gap(-1)	0.265	0.222	0.386	0.358
	(5.53)***	(3.23)***	(4.92)***	(5.65)***
ΔlogNEER(-1)	-0.093	-0.094		
	(4.57)***	(2.75)***		
Observations	385	374	99	88

Sources: Commission services.

In a third step the impact of product and labour market institutions on the effectiveness of the competitiveness channel was examined. For this purpose the regressions reported in the table above were re-run with the responsiveness of the countries' relative inflation rates to their relative output gap and to their own relative inflation records allowed to vary according to their relative scores on measures of product and labour market institutions by introducing interactions terms in the equations. The indicators are taken from OECD structural reform databases and the results are reported in the table below. Tight product market regulation appears to raise the persistence of relative inflation when the relative output gap is negative and so does strict employment protection. A high minimum wage and high union density reduce the short-run responsiveness to relative slack, i.e. lead to more price rigidity if the relative output gap is negative. High unemployment benefits lead to more price rigidity persistence in both directions, i.e. both when the economy is comparatively buoyant and when it is comparatively sluggish.

Competitiveness, adjustment, and labour and product market institutions

Dependent variable: ∆log P	Interaction with:	1970 -2006	1999-2006	Relative output gap<0
Explanatory variables:				
Relative output gap(-1)	Overall Product Market Regulation Indicator			
	Price Control	neg**	neg**	
	Employment Protection Legislation	neg**	neg*	
	Minimum wage			neg**
	Union Density		pos***	neg***
	Unemployment Benefits Replacement Rate		neg***	
	High Corporatism			
	Intermediate Corporatism			
	Low Corporatism	pos***		
∆logP(-1)	Overall Product Market Regulation Indicator		neg**	pos*
	Price Control		neg***	pos**
	Employment Protection Legislation	pos***		pos***
	Minimum wage	pos***		
	Union Density			neg*
	Unemployment Benefits Replacement Rate		pos***	
	High Corporatism	neg**		neg*
	Intermediate Corporatism	pos**		pos**
	Low Corporatism			neg***

Notes: The table reports the sign and significance of the interaction of structural indicators with the relative output gap and the persistence variable using the same specification as in columns (2) of the previous table (GMM estimate)
Sources: Commission services.

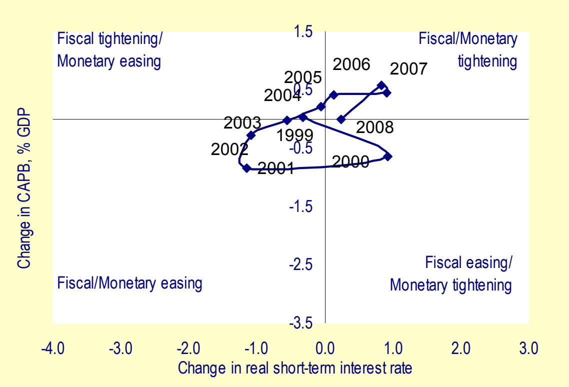
was still responding to recession fears in the wake of the Asian crisis. It thus failed to stem the upswing and – despite extremely favourable conditions – to consolidate budgets. In the subsequent downturn fiscal policy was eased on the back of windfall gains stemming from the dotcom boom and a busy electoral agenda, and while with hindsight this looks like a countercyclical response to weakening activity, in reality this was largely unintentional.[10] In the event fiscal positions deteriorated and this led to breaches of the 3% of GDP deficit ceiling in some countries and difficulties in enforcing the SGP, and a painful consolidation ensued. After its 2005 reform, member countries reasserted their ownership of the SGP and enforcement has since considerably improved.

A balanced policy mix

The early debates highlighted the risk of unbalanced policy mixes, with participating countries' fiscal policies working against, rather than supporting, monetary policy. In theory a succession of unbalanced policy mixes, already undesirable on its own account, also risks triggering volatile movements in the external value of the currency – with strong appreciations during upswings if monetary policy tightening is not supported by fiscal restraint. These fears have in fact proved to be largely unfounded, with fiscal and monetary policies supporting each other, aside from a short spell of pro-cyclical fiscal policies during the dotcom boom in 1999-2000 (Graph 7).

[10] See Buti, M. and P. van den Noord (2004), 'Fiscal discretion and elections in the early years of EMU', *Journal of Common Market Studies*, Vol. 42, pp.737-756.

Graph 7: **Fiscal-monetary policy mix in the euro area**
(in pp, 1999 to 2008) (1)



(1) 2008 - forecast values.
Source: Commission services.

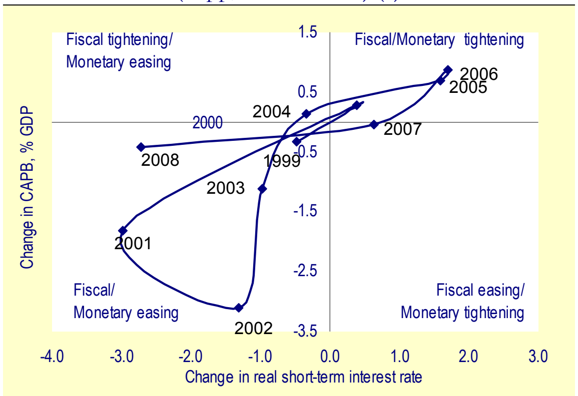
A striking feature of macroeconomic policies in the euro area, compared to the US, is that they have been less responsive to the cycle. As becomes evident from inspecting Graph 8, both the fiscal and the monetary stance produced markedly smaller impulses to aggregate demand than on the other side of the Atlantic. There are several explanations for the different degrees of policy activism observed.

First, the more aggressive easing of macroeconomic policies in the US in the early 2000s was partly justified by a much sharper deterioration in the output gap in the early stages of the downturn than in the euro area. More generally, while stronger policy activism in the US may be motivated by more pronounced cyclical swings in economic activity, those swings may in fact be partly caused by it.

Second, greater fiscal activism in the US must also been seen against the background of an economy in which automatic stabilisers play a comparatively smaller role.[11] Furthermore, budgetary policy making in the euro area is constrained by the provisions of the SGP, which puts clear restrictions on discretionary measures. This is rooted in a growing scepticism about the effectiveness of discretionary fiscal policy making and an increasing tendency to rely on automatic fiscal stabilisers.

Third, as regards the monetary policy stance, the stronger activism in the US may reflect the greater flexibility of its economy, with prices and wages responding more strongly to slack, thus creating more leeway for monetary policy to provide stimulus in a downturn (and vice versa in an upturn). The question may, however, legitimately be asked if these greater interest rate fluctuations orchestrated by the Fed explain the extent of the housing boom and bust in the US.

Graph 8: **Fiscal-monetary policy mix in the US**
(in pp, 1999 to 2008) (1)



(1) 2008 - forecast values.
Source: Commission services.

5. *Market functioning*

A boost to financial market integration

There is strong evidence that the creation of the single currency has spurred the integration of financial markets in the euro area. This has supported the financial sector's adjustment role in several ways: by encouraging the movement of cross-border capital towards its best uses; by diminishing the risk of local credit crunches; and by promoting risk diversification and associated cyclical smoothing.

The most immediate and extensive impact of EMU on financial integration has been felt on the euro-area markets for unsecured money and derivatives. Almost as soon as EMU was launched, interest rates on inter-bank deposits and derivative contracts across the euro area converged fully on the benchmark Euribor and Eonia rates (Graph 9).

[11] See also discussion in European Commission (2007), ibid, p 36-37.

Box 4: **Assessing the fiscal stance in the euro area to date**

The first ten years of EMU roughly coincide with a full business cycle, consisting of three phases, 'boom' (or 'good times'), 'downturn' and 'recovery'. A boom is defined here as an episode in which the output gap is positive and increasing. A downturn is an episode in which the gap is falling and turning negative and a recovery is an episode in which the negative gap is closing. There is a strong resemblance between the latest cycle (1999-08) and its predecessor which also spanned ten years (1989-1998) and portrayed a similar time profile for the output gap. Virtually all euro-area countries followed similar cyclical patterns, with output gaps positive and expanding in the booms of 1989- 1990 and 1999-2000, contracting (and turning negative) in the downturns of 1991-1993 and 2001-2003 and then closing again in the recoveries of 1994-1998 and 2004-2008.

For the assessment of the stance of fiscal policy it is important to consider also the output gaps in real time. It suggests a much smaller variation of the level and changes of the output gap, a phenomenon that is common to virtually all euro-area countries. Apparently, most countries failed to perceive the relatively volatile swings going on at the time. More specifically, many countries did not recognise the positive values and saw smaller increases of the output gap in 1999-2000, and they were also largely unaware of the extent of the 2001-2003 downturn.

Fiscal policy stance in the euro area: real time and expost, 1996-2007

	Boom 1999-2000		Downturn 2001-2003		Recovery 2004-2008	
	Real time	Ex post	Real time	Ex post	Real time	Ex post
Austria	-	-	**-**	**-**	**+**	**+**
Belgium	-	**+**	+	**-**	**+**	**+**
Germany	-	-	+	+	-	-
Greece	**+**	-	+	+	**+**	-
Spain	-	**+**	**-**	**-**	-	-
Finland	-	-	+	+	-	-
France	-	**+**	+	+	-	-
Ireland	-	-	+	+	-	-
Italy	-	**+**	+	+	**+**	-
Luxembourg	**+**	-	+	+	-	**+**
Netherlands	-	-	+	+	-	-
Portugal	**+**	**+**	+	**-**	**+**	-
Euro area	-	**+**	+	+	-	-

Note: "-" stands for contractionary fiscal policy; "+" for expansionary fiscal policy. Pro-cyclical episodes are in bold.
Source: Commission services.

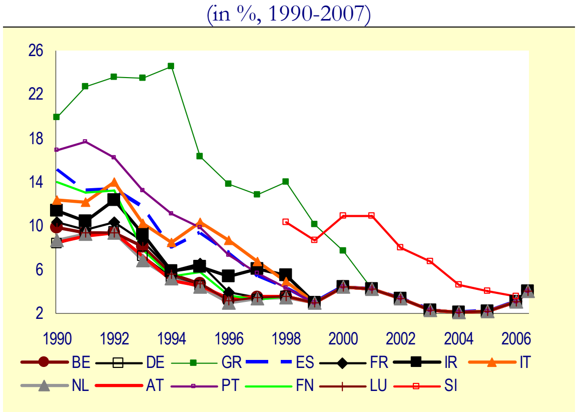
The issue then becomes how fiscal policy, as gauged by the change in the cyclically-adjusted primary balance as a share of GDP, behaved during the cycle, both in real time and ex post. Differences between the two largely reflect the assessment of the output gaps as revisions in the nominal budget numbers themselves have been comparatively minor. Looking at the record in more detail (see graph below), the following can be inferred:

- In the 1999-2000 boom procyclicality was not very widespread, although on aggregate the stance was slightly stimulatory. This does not compare unfavourably with the boom of 1989-1990, when fiscal policy was clearly eased in a procyclical manner in the vast majority of countries – with the notable exceptions of Italy and Belgium where high debt levels and an associated surge in debt servicing forced fiscal consolidation upon them. However, the quasi-neutrality observed ex post was not in most countries' ex ante plans, with the real time measure suggesting that on average the fiscal stance was tightening – i.e. was counter-cyclical. This reflects the underestimation of the extent of the boom and hence the cyclical component of fiscal gains: the perceived fiscal tightening in reality reflected the response of the automatic stabilisers to the ongoing upswing.
- In the 2001-2003 downturn the fiscal stance can be seen with hindsight to have been stimulatory in most countries (except for Spain, Portugal and Austria) – i.e. it was counter-cyclical. This may have been motivated by stabilisation considerations, but it is more likely to have been driven by the mechanism described above: governments were responding as if there had been a structural improvement in the fiscal position and were spending the windfall gains. This tendency may have been reinforced by the one-off proceeds of the UMTS

licence sales in some countries and the unusually busy electoral calendar at the time – notably in the larger countries. The ex ante stance also suggests counter-cyclical fiscal stimulus in this episode, but again this was probably accidental. It is in contrast with the 1991-1993 downturns when many countries tightened their budgets, possibly in response to sustainability concerns and financial market turbulence.

- In the 2004-2008 recovery governments were forced to correct the past excesses, with several countries having had to face Excessive Deficit Procedures. The fiscal tightening eventually leaned against the wind of the recovery, but this was prompted more by the fiscal consolidation needs imposed by the SGP than by a desire to choke off the upswing. This drive to consolidate budgets is confirmed by the real time measure, which also indicates a tightening fiscal policy stance. This behaviour is quite similar to the previous cycle, when fiscal policy was tightened in the recovery phase in a vast majority of countries (France is a notable exception). This reflected the measures taken to qualify for euro adoption subsequent to the Maastricht Treaty. Electoral considerations may have played a role as well: qualifying for the single currency was seen to raise the odds of re-election, whereas in normal circumstances governments tend rather to ease fiscal policy during election campaigns.

Graph 9: **3-month interbank rates**
(in %, 1990-2007)



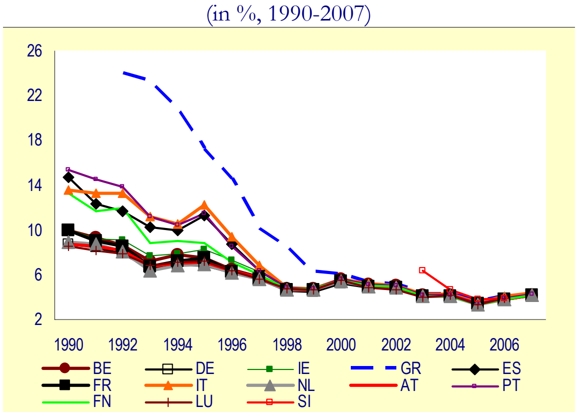
Source: Commission services.

EMU also had a very substantial impact on the integration of the market for government bonds, which are important not only as a source of government financing but also in providing reference pricing for other financial instruments. Well ahead of the launch of EMU, there was a process of sustained convergence in yields on bonds issued by the euro-area Member States (Graph 10).

The availability of an integrated cash market for government bonds in the euro area has spurred the development of markets for other related asset classes, such as corporate bonds, covered bonds, asset-backed securities and a range of derivative instruments. While the amount of gross issuance of government bonds in the euro area has not changed significantly since 1999, issuance of these non-government bonds has expanded significantly over the period. Empirical analysis suggests that the expansion in these market segments can be attributed to a range of economic and technical factors but the euro is found to have affected corporate-bond issuance both directly through the elimination of currency risk and more indirectly via higher financing needs due to euro-related corporate restructuring.[12]

The impact of EMU on the integration of equity markets has been less pronounced than in other asset markets but there is some indication that equity-market integration has proceeded faster in the euro area than at the global level, particularly since the introduction of the euro. Integration of financial market infrastructure has also advanced. Progress has been made in cross-border wholesale financial services, while the Single Euro Payments Area (SEPA) is set to eliminate differences between national and cross-border retail payments.

Graph 10: **10-year government bond yields**
(in %, 1990-2007)



Source: Commission services.

[12] See for instance ECB (2004), 'The euro bond market study', European Central Bank (December). http://www.ecb.int/pub/pdf/other/eurobondmarketstudy2004en.pdf

However, financial integration remains work in progress. While it has progressed substantially since (and partly owing to) the introduction of the euro, several markets are still fragmented and the pace of integration varies from one country to another. For instance, secured money markets – including the markets for T-bills, commercial paper and certificates of deposit, as well as the private repo market – have remained more segmented along national borders due to national differences in legal and tax frameworks and continued fragmentation in national clearing and settlement infrastructures. Cross-border provision of retail financial services is also lagging and regulatory and supervisory costs for financial intermediaries operating in a multi-jurisdictional environment remain high. As well, the cross-border cooperation in arrangements for crisis prevention, management and resolution should be stepped up as financial integration proceeds.

The remaining fragmentation represents an opportunity cost for the euro-area economy, which needs a high degree of financial integration not only to raise productive potential but also to improve its capacity to adjust to country-specific shocks.

Little evidence of 'TINA' effects

The single currency was expected by some to spur governments to undertake structural reform, as this was seen as the only way to enhance the market-based adjustment capacity so as to offset the loss of the exchange rate instrument of intra-area adjustment – this is the so-called There-Is-No-Alternative (TINA) hypothesis.[13] Others, however, argued that the disappearance of the exchange rate risk by improving market competition would rather lead to demand for more protectionism and hence weaken the incentives for structural reform.[14] The evidence is not very conclusive, but it is clear that on balance the single currency has had little positive effect on the pace of structural reform, which invalidates the TINA hypothesis.[15] Consistent with these findings, the analysis reported in Box 5 indicates that euro-area countries have on average been less forthcoming in implementing the structural policy recommendations made to them by the EU under the Broad Economic Policy Guidelines (BEPGs) – a Treaty-based tool for economic policy coordination – in the period 2000-2005. In particular, progress in the cross-border integration of services has been more muted than expected, which is particularly problematic.[16] It is in this area especially that price rigidities persist. This has been recognised by the European authorities, such as the Eurogroup and the European Commission, which in turn has led to intensified surveillance of national structural policies in the euro area in the framework of the Lisbon Strategy for Growth and Jobs, which was revamped in 2005.

6. *The international role of the euro area*

At the outset there was a consensus that the euro would be well received internationally but would not match the US dollar's dominant position. In practice, the euro quickly emerged as the second most important international currency alongside the US dollar and continues to consolidate this position. The euro has become a prominent currency of denomination in international debt markets and its role as an invoicing and reserve currency has been growing as well (Graph 11). It plays an important role as an anchor or reference currency in the managed exchange rate regimes of about 40 countries. Even so, the US dollar remains the first global currency in many areas, in part due to incumbency effects, and the euro's international role remains relatively concentrated in the regions neighbouring the euro area. This suggests that there is considerable scope for the

[13] See for example, Bean, C. (1998), 'The interaction of aggregate-demand policies and labour market reform', *Swedish Economic Policy Review*, Vol. 5, pp. 353–382.

[14] See for example, Calmfors, L. (2001), 'Unemployment, labour market reform and monetary union', *Journal of Labor Economics*, No. 19(2), pp. 265–289.

[15] Duval, R. and J. Elmeskov (2006), 'The effects of EMU on structural reforms in labour and product markets', *ECB Working Paper Series*, No. 596, March, see no acceleration of reforms in EMU. A slowdown in reforms in 1999-2004 relative to 1994-1998 is reported by Duval, R. (2005), 'Fiscal positions, fiscal adjustment and structural reforms in labour and product markets', in Deroose, S, E. Flores, and A. Turrini (eds.) (2005), 'Budgetary implications of structural reforms', *European Economy – Economic Papers*, No. 248.

[16] A large part of the better productivity performance registered in the US relative to the euro area since the 1990s may be traced back to service sectors. See Havik, K., K. McMorrow, W. Röger and A. Turrini (2008), ibid.

Box 5: The impact of the euro on structural reform

From the economic literature emerges the picture that being in or out of the euro area, or the launch of the single currency itself, has not been a stimulus for structural reform – which is a concern in view of the euro area's stronger reform needs than those of the wider EU. It appears therefore useful to crosscheck this finding with an alternative set of reform indicators. The approach chosen is to analyse whether euro-area countries have fared better or worse than non-euro-area countries in terms of respecting the recommendations addressed to them by the EU under the Broad Economic Policy Guidelines (BEPGs) – a Treaty-based tool for policy coordination.

Since 2000, the BEPGs have provided the basis for the European Council, upon proposal by the European Commission, to issue recommendations for economic reform in the EU countries. Every year the European Commission has assessed progress in the Member countries with the implementation of policies to address these recommendations. Though the assessment is mainly qualitative, progress with each recommendation has been classified in four categories (3 = complete, 2 = in progress/partial, 1 = limited, 0 = none). Scores are computed in the policy areas of product markets (including knowledge-economy reforms) and labour markets (including reforms of social security and pensions). The data set comprises the period 2000-2005, with annual recommendations and implementation reports available from 2000 to 2002 and multi-annual recommendations available for the 2003-2005 period. The analysis hence does not cover the period since the re-launch of the Lisbon Strategy in 2005, when the later was revised significantly. This yields four observations per country and 60 in total (see table below).

Recommendations and implementation scores in the Broad Economic Policy Guidelines 2000-2005

	EA12	Non-EA control group (DK, SE, UK)	Top 3 EA performers	Standard deviation EU15
Number of recommendations	22.8	15	14.3	6.7
- Labour market	10.3	5.3	4.3	4.5
- Product market	12.4	9.7	10.0	2.6
Implementation score (1)	1.4	1.7	1.6	0.2
- Labour market	1.3	1.7	1.5	0.3
- Product market	1.4	1.6	1.6	0.2

(1) score encompasses 0 (no measures) via 1 (partial, limited), 2 (in progress) and 3 (complete)
Sources: Commission services.

The table compares the average scores of the 12 euro-area Member States with those of the UK, Denmark and Sweden, which have remained outside the euro area. Over the period reviewed, there were more recommendations addressed to the average euro-area Member State than to the average other country, suggesting that euro-area Member States were considered to have grater reform needs. No systematic difference emerges for the three out-countries in comparison with the three best countries in the euro area in terms of number of recommendations issued. Differences in the follow up to the recommendations between euro-area and non-euro-area countries are shown in the lower panel of the table. The average score for all euro-area countries was about one standard deviation worse than for the three out countries. Moreover, the score in each of the three out countries is higher than the euro-area average, although again the three best performers in the euro area had only a slightly smaller score than the three out countries.

While the latter findings point to a negative impact of euro-area Membership on the structural reform efforts, it is entirely possible that this effect is driven by a negative correlation between the number of recommendations and the policy effort devoted to each recommendation. Such a negative correlation is plausible: if governments have limited political capital and administrative capacity to reform, their average achievement will decline with the number of targets. The estimates in the table below show, however, that the correlation of structural reform with membership of the euro area remains negative even if controls are introduced for the number of recommendations and the size of the economy. It needs to be borne in mind that, as noted, the analysis does not cover the period since the re-launch of the Lisbon Strategy. The Commission concluded in its recent Strategic Report of December 2007 that considerable progress had been made since the re-launch of the Lisbon strategy in 2005, with visible progress on reforms in key priority areas.

The result reported in the table also suggests that the size of the economy has a positive impact on reform scores, which seems to contradict the widely held belief that small countries in the euro area are more active reformers. However, further analysis suggests that the significance of the positive coefficient is attributable to the relatively low scores in the assessment for two of the smallest Member States in the sample, Ireland and Luxembourg.

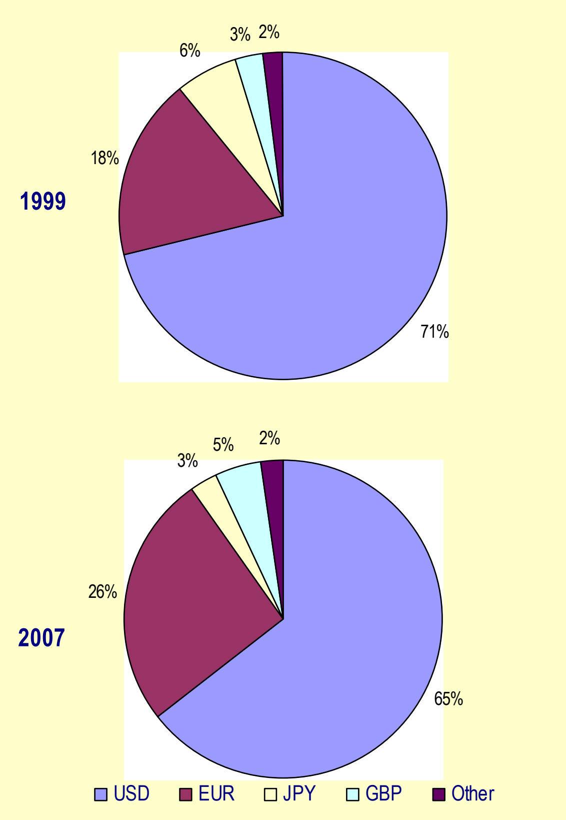
Determinants of structural reform scores based on BEPGs

	Constant	No	Size	EMU
1. Average 2000-2003/05	1.56	-0.02	0.07	-0.20
	(0.16)***	(0.005)***	(0.02)***	(0.08)**
	R^2 = 0.76	Obs. = 15		
2. Individual years	1.46	-0.07	0.09	-0.20
	(0.25)***	(0.03)**	(0.04)**	(0.12)
	R^2 = 0.23	Obs. = 60		
3. Individual years with year fixed effects	1.43	-0.05	0.08	-0.22
	(0.22)***	(0.03)**	(0.03)**	(0.11)**
	R^2 = 0.42	Obs. = 60		

Note: No - Number of recommendations, size - in(GDP in PPS, average 1999-2005), EMU - dummy for EMU Member States, OLS estimate, standard errors in brackets, *,**,*** significance at 10, 5, 1% level, respectively.
Sources: Commission services.

euro to continue expanding its role as a global currency.

Graph 11: **Currency shares in foreign exchange reserves**



Source: ***Commission services.***

Despite the growing global role of the euro and the fact that the euro area has become a pole of stability in the global economy, attempts to improve the external representation of the euro area on financial and monetary matters have not made much progress. More generally, Europe's external representation in international financial fora – such as the Bretton Woods institutions – remains fragmented, reducing the actual influence of the euro area despite the large number of seats that EU (and euro-area) countries hold in them. However, some progress was recently made with the euro area being represented at the meetings held in the context of the IMF-led multilateral consultations on global imbalances. Bilateral dialogues are held with strategic partners, but this involves the EU as a whole rather than the euro area as an entity in its own right – with one exception being the dialogue with China (where the Presidents of the ECB and the Eurogroup are involved together with the Commissioner for Economic and Financial Affairs).

7. Governance of the euro area

The economic governance structure of the euro area builds on a combination of 'subsidiarity' – which leaves policy responsibilities to the participating countries wherever possible – and various forms of policy coordination. The view underlying the Maastricht Treaty was that – aside from centralised monetary policy – coordination in EMU should mainly take place within a rules-based framework to ensure fiscal stability, thus, limiting the room for policy actions entailing negative spillovers to the rest of the euro area. Softer forms of coordination aimed at fostering 'good' behaviour have nevertheless become part and parcel of the EU governance structure, notably with the growing role of the Lisbon Strategy.

The governance structure of the euro area has helped promote a common understanding among euro-area policy makers of the importance of sound public finances and flexible product, labour and capital markets for the smooth functioning of EMU. As such it has contributed to deliver macroeconomic stability in many dimensions: low and stable inflation, greater resilience to adverse shocks, major efficiency gains associated with strong integration in financial and product markets, and better fiscal behaviour. Even so, EMU's governance arrangements have at times suffered from a deficit of political and national ownership, with some Member States reluctant to translate a common understanding of policy challenges into policy-making at home. Decisive steps to improve this situation were taken in 2005, notably a reform of the Stability and Growth Pact, the revamping of the Lisbon Strategy for Growth and Jobs, and the appointment of a President of the Eurogroup – the informal gathering of euro-area Finance Ministers that traditionally precedes the meetings of the Council of Economics and Finance Ministers (ECOFIN) – for a term of two years.

The Eurogroup has been charged with growing responsibility for the economic governance of the euro area, particularly since the appointment of its permanent President in January 2005. Over the last decade the Eurogroup's most important achievement has been to foster a common understanding among Finance Ministers of the principal policy challenges facing the euro area. The Eurogroup's proactive role in brokering a deal on revising the Stability and Growth Pact in March 2005 is clear evidence of its increasing importance in the euro-area's coordination process.

Improving fiscal governance

The dissuasive effect of the fiscal governance set-up embodied in the Stability and Growth Pact initially turned out not to be as effective as anticipated – even if the situation had clearly improved in comparison with earlier decades. Underlying budgetary imbalances were still built up during good times even if not to the same extent as previously. There were sizeable deviations from agreed adjustment paths of the fiscal position (Graph 12) and attempts to comply with the 3% of GDP reference value for budget deficits in some cases led to only cosmetic improvements.[17] In March 2005 a reform of the Stability and Growth Pact was adopted by the ECOFIN Council. Concerning the 'preventive arm' of the Pact it introduced a focus on structural balances and the possibility of adopting medium-term budgetary objectives that were better tailored to a country's specific circumstances, while allowing some flexibility in the pace at which this objective should be achieved, depending on a country's structural reform efforts (notably pension reform). In the 'corrective arm', the economic circumstances that could lead to a waiver of the excessive deficit procedure were reinterpreted and clarified. In addition, some flexibility was also introduced regarding the length of the adjustment period, inter alia to take into account possible adverse economic events with major unfavourable consequences for government finances. The implementation of the corrective arm now runs more smoothly, although further progress concerning the preventive arm would be warranted.

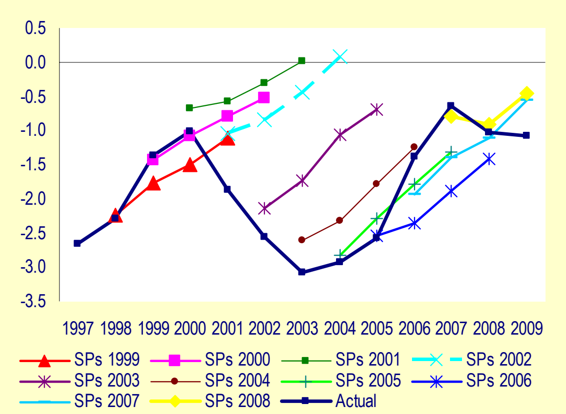
Other governance issues

Structural reform has remained largely within the remit of the Member States, but the need for enhanced structural reforms in the euro area was widely accepted from the outset. Article 99 of the EC Treaty requires all EU Member States to 'regard their economic policies as a matter of common concern and shall coordinate them within the Council'. The importance of structural reform for the functioning of the euro area has led to including references to the euro-area dimension in the Broad Economic Policy Guidelines (BEPGs) to which the Treaty has assigned a central role in the coordination of economic policies. Importantly, the BEPGs now help to internalise euro-area priorities – notably the need for flexible and effective adjustment of prices and wages in the absence of internal exchange rates – into Member States' reform

[17] See for reviews of the use of, respectively, stock-flow adjustment and other fiscal gimmicks and their incentives: Buti, M., J. Nogueira Martins and A. Turrini (2007), 'From deficits to debt and back: political incentives under numerical fiscal rules', *CESifo Economic Studies*, Vol. 53, pp. 115-152, and Koen, V. and P. van den Noord (2006), 'Fiscal gimmickry in Europe: One-off measures and creative accounting', in P. Wierts, S. Deroose, E. Flores and A. Turrini (eds): *Fiscal policy surveillance in Europe*, Basingstoke: Palgrave McMillan.

priorities. However, as discussed further in Part II of this report (see Section 'Reaping the benefits of coordination'), with the current system of governance in EMU, the full potential benefits of the coordination of Member States' structural reforms have not been exploited.

Graph 12: **Slipping fiscal targets** (1)



(1) General government budget balances (excluding UMTS, % of GDP) as projected in Stability Programmes (SPs)
Source: Commission services.

Another important area of EMU governance concerns the conduct of exchange rate policy, for which the Council and the Eurosystem share responsibility. Formal or informal agreements on exchange rates with partners outside the euro area require a decision by the Council. The Eurosystem (the system of euro-area National Central Banks and the ECB) holds the euro-area's foreign exchange reserves and has sole responsibility for exchange rate intervention. In practice the conduct of exchange rate policy has not encountered major problems. However, the views of Ministers in the Eurogroup do not always converge and this has occasionally led to inconsistencies in public statements. The 2005 decision to appoint the Eurogroup President for a term of two years and his expanded participation in G7 meetings along with the use of terms of reference on this topic has improved the situation in this regard.[18]

Finally, the proper functioning of EMU requires a comprehensive information system to provide the statistical data on which to base surveillance, coordination and policy decisions. An action plan on EMU statistics was endorsed by the ECOFIN Council in September 2000 which identified the statistical areas where progress was urgent. This boosted the development of high-frequency statistics, although more could be done to increase the timeliness and scope of EMU statistics.

8. *Concluding remarks*

The launch of the euro represented a sea change in the macroeconomic environment of its participating Member States. A single monetary policy combined with national but coordinated fiscal policies has fostered macroeconomic stability. The European Central Bank (ECB) quickly established and has maintained its credibility. The intra-European exchange rate tensions that periodically traumatised the European economies have become a thing of the past. Budgetary discipline has improved significantly, strengthened by the Stability and Growth Pact (SGP). The euro-area economy has pursued a faster track of economic and financial integration than the rest of the EU and its resilience in the face of external shocks has become stronger. Progress has been made on many fronts.

However, not all expectations have been fulfilled:

- At around 2% per annum, potential growth remains too low. Although employment has soared, and despite the positive impact of the single currency, productivity growth has been slow and the euro area's per capita income has stalled at 70% of that of the United States.

- There have been substantial and lasting differences across countries in terms of inflation and unit labour costs. This has led to accumulated competitiveness gains/losses and large external imbalances, which in EMU require long periods of adjustment. Essentially, this protracted adjustment reflects the fact that structural reforms have been less ambitious since the launch of the euro than in the run-up to it.

- As an international currency the euro is a major asset for all euro-area members and for the EU as a whole. In the present turbulent global economic environment, the

[18] Terms of reference summarise Ministers' understanding of particular issues and the implications for economic policy.

single currency provides a shield and can put the euro area in a unique position to play a key role in the global political arena in shaping globalisation. However this potential is not sufficiently exploited as the euro area has neither a properly defined international strategy nor effective international representation.

- While the Eurogroup has improved its functioning over the last decade through learning by doing, it has not yet emerged as a body that actively guides, coordinates and takes real leadership on matters that, although not always unique to the euro area, are of particular importance for euro-area members. In particular, the Eurogroup has not yet been able to systematically turn common understanding among euro-area Finance Ministers into concerted policy action, most notably in the area of structural reforms.
- Finally, the public image of the euro does not fully reflect EMU's successful economic performance. The euro is often used as a scapegoat for poor economic performances that in reality result from inappropriate economic policies at the national level. Furthermore citizens in some countries believe that prices have significantly increased because of the euro.

Clearly, important work still lies ahead. But beyond the fulfilment of initial expectations, the EMU policy agenda for the next decade will be marked by the emergence of new global challenges which will amplify the weaknesses of EMU outlined above. This is the topic of the next part section in this issue.

EMU@10

II. Challenges ahead

In spite of an overall positive assessment of its first 10 years, EMU now faces new challenges that were not fully apparent when it was devised. Globalisation is progressing apace and natural resources are increasingly scarce. Changing terms of trade on world markets and the unwinding of global imbalances could have highly asymmetric effects on the economies of the Member States. The progressive enlargement of the euro area will also make economic structures increasingly diverse within it. These developments will require a high degree of resilience from euro-are economies and an efficient intra-area adjustment capacity. Climate change and the effects of population ageing will put additional strains on the capacity of the euro-area economy to grow. Promoting growth and employment, ensuring efficient intra-area adjustment, enlarging the euro area smoothly, and successfully meeting the area's increased responsibilities in global macro-financial governance, are key priorities for the coming years. The extent to which these objectives will be achieved will depend on the capacity of euro-area members to build a common understanding on the issues ahead and to implement adequate responses both at national and euro-area/EU level.

1. A changing world landscape

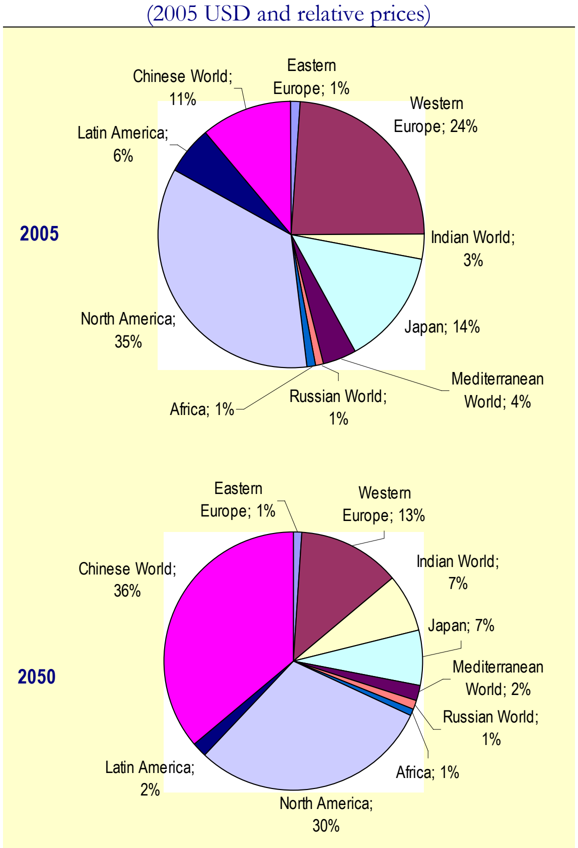
Global trends ahead

Looking ahead, the global landscape looks different now from how it did at the launch of EMU.

Globalisation has been progressing apace. Emerging economies have become a powerful engine of growth and current projections indicate that their role in the world economy will increase still further (Graph 13). Financial markets are becoming increasingly integrated, with cross-border financial flows outpacing trade flows and financial markets in the emerging world gaining global importance. Meanwhile, the export-driven growth strategies in emerging economies along with dissaving in the United States have contributed to the build-up of global current account imbalances. The risk of a disorderly unwinding of these imbalances has been lurking for some time and while the downturn in the US and the recent depreciation of the dollar go some way towards easing the pressure, they continue to pose a threat for the stability of the world economy.

The growing scarcity of natural resources and climate change may become more acute and act as a constraint on non-inflationary growth in the developed world. The possible end of the disinflation pressures brought by the integration of China's and India's labour force into the global economy and substantial changes in relative prices caused by climate change and tensions on natural resources markets – which are manifesting themselves in temporarily higher inflation – are likely to present an increasingly stiff challenge to monetary policies. Moreover, this not only makes a strong call on the capacity

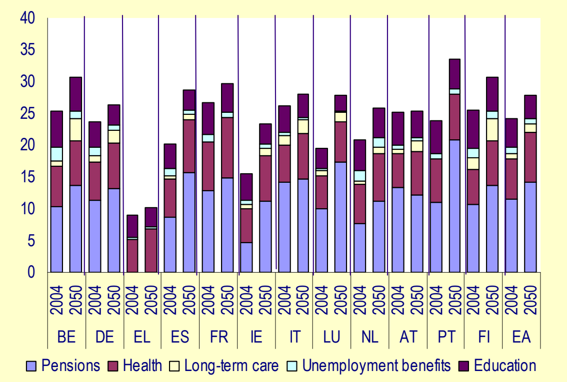
Graph 13: **World GDP in 2005 and 2050**
(2005 USD and relative prices)



Source: Poncet, S. (2005), The long-term growth prospects of the world economy: Horizon 2050', *CEPII Working Paper* 2006/16.

of economies to adjust, it is also a concern in terms of the adverse income redistribution effects that stem from commodity price inflation – which come on top of the redistribution effects of globalisation combined with technological developments, via a shift in labour demand away from low-skilled work.

Graph 14: **Age-related expenditure in the euro area** (in % of GDP, 2004-2050)



Source: Commission services.

The rapid ageing of populations is bound to leave its mark on the growth potential and public finances of the advanced economies. It calls for policies to reinvigorate labour market participation, raise labour productivity and strengthen fiscal governance. The lower adaptability of an ageing population will make adjustment to shocks more difficult. Upward pressure on age-related expenditures (Graph 14) and consequently on public finance positions, reinforces the need to keep fiscal policies in check and maintain a focus on the longer-term sustainability of public finances.

Implications for the euro area

These global trends will pose challenges for the performance of all advanced economies in terms of growth, inflation, macroeconomic stability, adjustment capacity, the sustainability of social security systems and the distribution of income and wealth. Euro-area countries are well-equipped to adapt to a globalising world. European trade integration and monetary unification were major leaps forward towards globalisation and the perception that past challenges were successfully dealt with provides comfort for the future. Euro-area economies have long been relatively open economies not only towards other euro-area and EU countries but also towards other advanced, emerging and developing trade partners. Euro-area participation also offers a clear advantage in terms of stable macroeconomic conditions. However, in several respects, the ongoing global trends produce a number of policy challenges that are even more compelling for – if not unique to – the euro area.

First, the euro area has limited natural resources, and is rapidly ageing while public indebtedness is high. Therefore, many euro-area countries tend to be more exposed and less equipped to respond to ongoing trends which have implications for potential growth. A new impetus for structural reform, building on the Lisbon Strategy for Growth and Jobs, is a priority in the EU as a whole, but an absolute necessity in the euro area, since the lack of efficient markets affects not only the growth potential but also the adjustment capacity of euro-area countries.

Second, from the outset the occurrence of country-specific demand shocks was seen to be a major concern for EMU in the absence of internal exchange rates. They proved to be less of a concern in the first ten years, partly because macroeconomic stability at the national level improved with the adoption of the single currency, and partly also because the global macroeconomic environment has been relatively benign.[19] Going forward, while country-specific shocks are less of a concern than feared before the inception of EMU, notably due to reduced risks of idiosyncratic fiscal shocks, the global environment is set to become more challenging for intra-area adjustment, since exchange rate and terms of trade shocks, are likely to become more prominent. These common shocks affect participating countries differently due to differences in exposure to trade, raw materials and finance (see Box 6).

Third, the relatively greater prominence of adverse supply shocks heightens the risk of conflicts between fiscal policies and monetary policy. The strong counter-cyclicality of interest

[19] It has been shown that reduced volatility of fiscal positions is associated with more synchronised output (Darvas, Z., A. Rose and G. Szapáry (2005), 'Fiscal divergence and business cycle synchronization: Irresponsibility is idiosyncratic', *NBER Working Papers*, No. 11580).

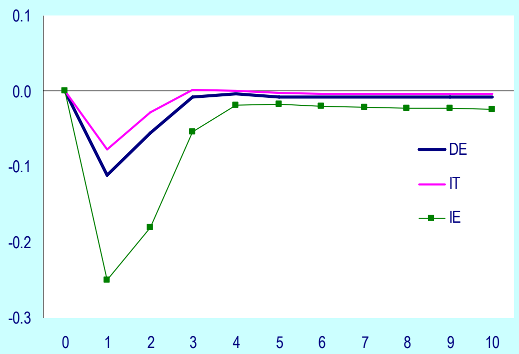
Box 6: **Asymmetric effects of common external shocks**

The direct exposure of the euro area to extra-euro area trade is only about 17% of GDP but the diversity across Member States is large, which implies that common shocks may have important cross-country repercussions. This is illustrated with simulations with a multi-region version of the two-sector (tradables and non-tradables) QUEST model (European Commission 2006). Simulations are run for three representative countries: Germany, Italy and Ireland. Germany has a trade exposure to the rest of the world in line with the euro-area average, while Italy has a specialisation pattern biased towards more 'traditional' sectors and is more exposed to competition from emerging markets. Ireland has an above-average degree of openness and a high trade exposure to the rest of the world.

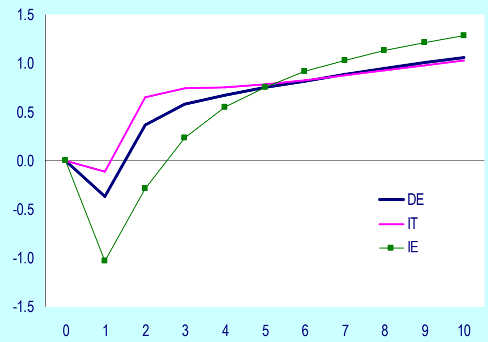
A negative shock to US private demand (both private consumption and investment are assumed to fall by 1%) leads to a reduction in US import demand and exports in euro-area countries. Under flexible exchange rates, a more exposed country like Ireland would have depreciated vis-à-vis other less exposed European countries. However, in the euro area, more exposed countries only depreciate in real effective terms and this requires a stronger relative drop in GDP than under a flexible exchange rate regime. As shown in the first graph below (top left), GDP in Ireland falls more heavily just after the shock than in Germany and Italy.

In the second graph (top right), a shift in investors' preferences away from dollar-denominated assets towards euro-denominated assets leads to a risk premium shock, with the bilateral exchange rate of the dollar with respect to the euro falling by about 10 %. In the first year, the nominal effective exchange rate appreciation amounts to 2.8 % for Italy, 3.7 % for Germany and 5% for Ireland. The shift in investors' preferences raises real interest rates in the US and lowers those of the euro area, which boosts domestic demand in the euro area even if competitiveness deteriorates. The net effect on output is negative in the first stage but becomes positive in the medium run. The initial effects are again strongest in Ireland and weakest in Italy, but the medium run gain is largest in Ireland.

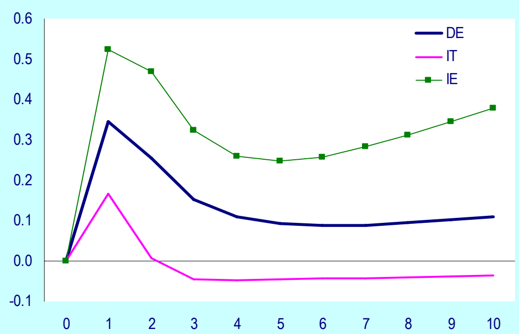
GDP spillovers of a US slowdown
(deviations from baseline in pp)



GDP effects of a euro appreciation due to an increase in investors' preference for the euro
(deviations from baseline in pp)



GDP effects of higher productivity growth in Asia
(deviations from baseline in pp)



Source: Commission services

In the third graph, higher productivity growth in emerging economies in the tradable goods sector yields lower import prices to the benefit all euro-area countries, but harm exporters in countries that exhibit a specialisation pattern biased towards more traditional sectors, like Italy. Lower import prices boost consumption and raise GDP. A more open economy like Ireland benefits more from this shock. Exporters in Italy, however, are more exposed to competition from Asian producers and lose more market share. Italy's GDP fall in the medium run, unlike in Germany and, even more strongly so, in Ireland.

Reference:

European Commission (2006), 'The EU Economy 2006 review – Adjustment dynamics in the euro area, *European Economy*, No. 6.

rates observed in the past decade in the euro area suggests that the trade-offs between inflation volatility and growth volatility have so far remained limited, possibly as a result of a prevalence of demand over supply shocks. Moreover, in past years, many euro-area countries benefited from a substantial improvement in the conduct and credibility of monetary policy.[20] However, in the future, not only may inflationary supply shocks become more frequent, but further improvements in the conduct of monetary policy are unlikely. Policy makers may seek to offset the adverse effects of supply-shock-driven inflation by fiscal stimulus, protectionist measures or other quick fixes. However, this would ultimately jeopardise distribution goals, endanger the sustainability of public finances and overburden the single monetary policy. Hence countries will be called on to demonstrate their willingness to fully embrace the objective of macroeconomic stability.

Fourth, there is a unique and pervasive link between the single currency and financial market integration. In the absence of nominal adjustment via internal exchange rates it is essential that other channels of shock absorption are developed. Financial markets are a particularly important one as they facilitate risk sharing and consumption smoothing, and can also make the transmission of monetary policy more powerful whereas fiscal policy will become less effective.[21] In addition, financial integration can leverage the benefits of structural reforms, allowing capital to flow freely to its best uses, and foster good incentives to reform product and labour markets (see Box 7). However, in light of the disappearance of exchange rate premia, the counterpart of the benefits from financial integration can be widening current account imbalances, increased risks of housing bubbles, boom-bust cycles and financial contagion, risks which are aggravated if supply rigidities in the real sector are not corrected and if regulation and supervision remains fragmented across euro-area countries.

Fifth, rising global financial and trade integration is contributing to the emergence of the euro as an international currency alongside the dollar. This tendency is irrevocably altering the role of euro-area currency diplomacy and creates new responsibilities for euro-area countries in global macro-financial governance.

In sum, the euro area shares with most other developed economies a rapidly changing global landscape, ageing populations and rising concerns about energy and climate change. These global trends have major implications for the euro area over the next ten years and beyond and call for determined efforts to promote growth and jobs, ensure efficient intra-area adjustment, improve the quality and sustainability of public finances, secure a smooth enlargement of the euro area and carefully manage the euro-area's global role.

2. New goals and challenges for the euro area

Promoting growth and job creation

While job creation has been impressive in the euro area during the past 10 years, total factor productivity (TFP) growth stalled compared with other advanced economies, notably the US. If left uncorrected, this tendency could be very costly in terms of slowing down income growth, jeopardising fiscal sustainability amid ageing populations, complicating the achievement of price stability as primary commodity prices soar, and ultimately putting a brake on employment growth. Indeed, the available longer-term projections indicate that potential growth is expected to halve in euro-area countries in the coming decades (Graph 15). This tendency will crucially be driven by falling labour inputs associated with ageing.[22] Against the background

[20] E.g. Cecchetti, S. G., A. Flores-Lagunes and S. Krause (2006), 'Has monetary policy become more efficient? A cross-country analysis, *Economic Journal*, No. 116(511), pp. 408–433, April.

[21] For a survey of arguments on the risks and benefits of financial integration in the euro area see e.g. European Commission (2007), 'EU financial integration and euro-area adjustment', *Quarterly Report on the Euro Area*, Vol. 6, No. 2.

[22] See, e.g., Carone, G, C. Denis, K. McMorrow, G. Mourre and W. Röger. (2006), 'Long-term labour productivity and GDP projections for the EU-25 Member States: A production function framework', *European Economy — Economic Papers*, No. 253.

Box 7: **Financial market integration and capital allocation**

Enhanced financial integration among euro-area countries is one of the most notable achievements of EMU. However, while research on the impact on financial integration on growth in the EU (e.g. Guiso et al. 2004) or on risk-sharing (e.g., Kalemli-Ozcan et al. 2004) are quite abundant, much less work has so far been carried out on assessing the impact of the integration of financial markets on the allocation of capital. Improved capital allocation across productive activities is a key channel through which financial development and integration can deliver higher growth (higher TFP growth associated with a more productive distribution of resources across alternative uses).

Against this background, this box assesses the impact of financial integration on the responsiveness of capital to changing productivity and cost conditions (see also Hartmann et al. 2007 and Roeger, Székely, and Turrini 2008). To this end, an investment variable was regressed against a measure of the 'net marginal product of capital', namely, the difference between the marginal product of capital and the user cost of capital. The elasticity of investment to this variable measures how much capital grows (or falls) in response to a positive (or negative) difference between its marginal product and its cost. A higher (or lower) elasticity is interpreted as characterising a more (or less) efficient allocation of capital, i.e., one in which there is a more (or less) effective response of capital whenever the (static) conditions for an efficient capital allocation are violated. This elasticity is allowed to vary depending on whether countries have adopted the euro and depending on the degree of financial market development and integration. In order to capture inertia in investment, the estimated equation also includes the 1-year lagged dependent variable. To capture the impact of possible omitted variables, country, sector and year fixed effects are included. Since variables are expressed in logarithms, the regression coefficient of the net marginal product of capital measures the elasticity of investment. The impact of financial integration on capital allocation is obtained by interacting the net marginal product of capital with indicators of integration of debt and equity instruments.

The table below reports the results for the baseline investment equation. Data on investment, capital productivity, and costs are taken from the EUKLEMS sectoral database. Data on financial integration are taken from Lane and Milesi Ferretti (2006). Data vary across sectors, countries and time. The sample includes 7 euro-area countries (DE, ES, FR, NL, IT, AT, FI) and 3 non-euro area countries (DK, UK, US). For these countries, a full set of variables including capital stock, investment, TFP etc. is available. As expected, investment reacts positively and significantly to the net marginal product of capital. Separate regressions for countries / years corresponding to euro participation (i.e., for euro-area countries and after 1998) reveal that investment in the countries which adopted the euro exhibits a stronger response to differences between the marginal product of capital and the user cost of capital (column (3)). The interaction of a euro dummy with the net marginal product of capital shows that in the euro area the elasticity of investment is significantly different compared with the rest of the countries (column (4)). Moreover, as revealed by the significant coefficient of the (non-interacted) euro dummy, the euro per-se appears to be associated with increased investment growth, possibly reflecting expectations of lower cost of capital.

Basic capital allocation equation

Dependent variable: Investment share	All years and countries	Non-euro countries	Participation in euro	All years and countries
	(1)	(2)	(3)	(4)
Investment share(-1)	0.561***	0.548***	0.626***	0.560***
	(19.47)	(17.74)	(7.55)	(19.27)
Net marginal product of capital	0.126***	0.115***	0.173**	0.118***
	(5.49)	(5.12)	(2.56)	(5.18)
Net marginal product of capital * euro dummy				0.047*
				(1.83)
Euro dummy				0.174**
				(2.10)
Observations	4365	3657	708	4365
R-squared	0.48	0.48	0.53	0.48

Notes: OLS regression, controlling for sector specific heteroskedasticy. The specification includes country, sector and year fixed effects. Absolute value of t statistics in parentheses: * significant at 10%; ** at 5%; *** at 1%.
The euro dummy identifies countries part of the euro area and years after 1998.
Investment share: log of the ratio between net real investment and lagged net real capital stock
Net marginal product of capital: log (marginal productivity of capital) – log (user cost of capital)

The table below reports results on the link between financial integration and capital allocation. The first column of the table analyses the role of integration in terms of debt instruments, while column (2) looks at cross-border holdings of equity assets. The financial integration variables are standardised to have zero mean and unit variance, so that the interaction of such variables with the net marginal product variable indicates how much the elasticity of investment increases for a one-standard deviation increase in the degree of financial integration compared with the average. Both the integration of debt and equity markets appears to raise significantly the elasticity of investment. Conversely, those variables do not exert a significant direct impact. Since rising financial integration has coincided to some extent with enhanced domestic financial development, the analysis has been repeated by controlling for the share of credit in GDP as a measure of financial development (columns (3)-(5)). It appears that the financial integration variables maintain a significant impact on the elasticity of investment also after controlling for the effect of financial development.

Capital allocation and financial integration

Dependent variable: Investment share	(1)	(2)	(3)	(4)	(5)
Investment share(-1)	0.558***	0.557***	0.560***	0.559***	0.557***
	(19.43)	(19.49)	(19.51)	(19.44)	(19.44)
Net marginal product of capital	0.125***	0.123***	0.123***	0.123***	0.122***
	(5.43)	(5.36)	(5.13)	(5.11)	(0.86)
Debt integration	0.047			0.057	
	(1.13)			(1.39)	
Net marginal product of capital * Debt integration	0.022**			0.020**	
	(2.52)			(2.10)	
Equity integration		0.056			0.051
		(1.17)			(0.91)
Net marginal product of capital * Equity integration		0.024**			0.024*
		(2.38)			(2.00)
Financial development			0.026	0.012	-0.011
			(0.93)	(0.353)	(0.29)
Net marginal product of capital * Financial development			0.015*	0.057	0.006
			(1.86)	(1.39)	(0.86)
Observations	4365	4365	4298	4298	4298
R-squared	0.48	0.49	0.48	0.48	0.48

Notes: OLS regression; controlling for sector specific heteroskedasticy; country, year and sector dummies. Absolute value of t statistics in parentheses: * significant at 10%; ** at 5%; *** at 1%.
Debt Integration: Cross-border holdings of assets and liabilities/GDP, debt instruments. Standardised variable.
Equity Integration: Cross-border holdings of assets and liabilities /GDP, equity instruments. Standardised variable.
Financial development: private sector credit as share of GDP. Standardised variable.

Overall, the results lend themselves to the following interpretation. The euro seems associated with greater efficiency in the allocation of capital across sectors and countries. Empirical work shows that the response of investment to differences between the marginal product and the user cost of capital has indeed increased in euro-area countries since 1998. Such an effect seems to be mostly explained by an accelerated pace of financial integration in euro-area countries in the late 1990s, for which the liberalisation of cross-border financial investment and monetary unification are assumed to have acted as major triggers.

References:

Guiso, L., P. Sapienza and L. Zingales (2004), 'Does local financial development matter?', *Quarterly Journal of Economics*, Vol. 119(3), pp. 929–969, August.

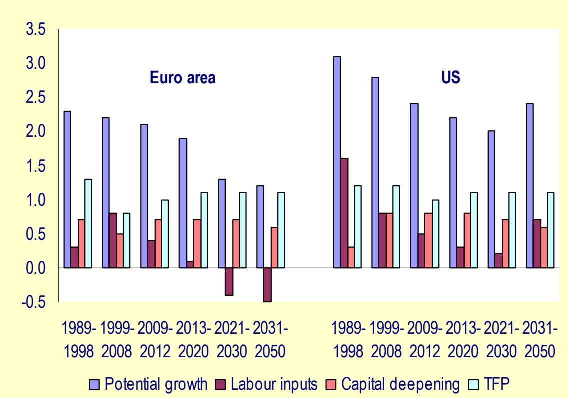
Hartmann, P., F. Heider, E. Papaioannou, and M. Lo Duca (2007), 'The role of financial markets and innovation in productivity and growth in Europe', *European Central Bank Occasional Paper*, No. 72.

Kalemli-Ozcan, S., B. Sørensen and O. Yosha (2003), 'Risk sharing and industrial specialization: Regional and international evidence', *American Economic Review*, No. 93(3), pp. 903–18, June.

of an expected contribution of capital deepening in line with that of other advanced economies, re-launching TFP growth will be key to containing the long-term reduction in euro-area growth potential.

A crucial challenge will thus be to ensure that TFP growth rebounds in a context of shifting global comparative advantages. Financial integration – itself fostered by the euro – would clearly help in this respect as it increases the

Graph 15: **Recent potential growth performance and projections: euro area and US**
(in %, period average)



Source: Commission services.

responsiveness of investment to cross-country differences in the marginal return on capital, which will thus flow more abundantly to countries where structural conditions are most favourable (Box 7).[23] This will tend to accentuate intra-area differences in growth performance, unless structural reforms are implemented in earnest in countries where structural conditions lag. This will require those countries to ensure that their firms are better able to compete at the technological frontier.[24] This calls for better human capital formation, the availability of financial instruments to reward projects with high returns and risk, a policy framework supportive of R&D investments, and a growth-friendly regulatory environment, notably with respect to start-up firms and would-be market entrants.[25]

Reforms in labour markets and welfare systems geared towards removing distortions in individual incentives regarding labour supply decisions would also be welcome.[26] This would help contain the reduction in labour inputs associated with ageing, where the larger euro-area countries in particular are lagging. Encouraging the labour participation of older and female workers would also be beneficial, as would a smoother transition from education to work. Reducing the costs associated with workers' relocation across economic activities and regions would enable a better match between supply and demand in the labour market. 'Flexicurity' arrangements that facilitate flexible labour market responses in exchange for income security would support this further.

Ensuring efficient intra-area adjustment

The working of the intra-area adjustment channels may improve over time as a result of trade integration and a better anchoring of inflation expectations and an associated decline in nominal (wage and price) rigidities. Increased financial integration would also help by increasing risk sharing, thus permitting a more stable pattern of consumption over time and across countries. However, tensions cannot be ruled out, especially for those euro-area countries that are more exposed to increasing competition from emerging economies or to external exchange rate shocks. Structural policies are

[23] Firm-level evidence shows that reallocation effects account for roughly half of the total aggregate productivity growth (Bartelsman, E., J. Haltiwanger and S. Scarpetta (2006), 'Reallocation and productivity growth: The FAQs', *2006 Meeting Papers*, No. 293, Society for Economic Dynamics).

[24] Recent economic theory has emphasised the role of framework conditions in enabling countries to grow via innovation rather than adoption of new-vintage existing technologies (Aghion, P. and P. Howitt (2006), 'Appropriate growth policy: A unifying framework', *Journal of the European Economic Association*, No. 4, 269–314. Recent evidence based on the EU KLEMS sectoral growth database confirms the view that TFP growth in EU countries is increasingly driven by competition taking place 'at the frontier' (Havik, K., K. McMorrow, W. Röger and A. Turrini (2008), 'The role of total factor productivity in explaining EU–US productivity differences: A macro, sectoral and industry level perspective', *European Economy — Economic Papers*, forthcoming,).

[25] See, e.g., Scarpetta, S. and T. Tressel (2002), 'Productivity and convergence in a panel of OECD industries: Do regulations and institutions matter?', *OECD Economics Department Working Papers*, No. 342; Nicoletti, G. and S. Scarpetta (2003), 'Regulation, productivity and growth: OECD evidence', *World Bank Policy Research Working Paper*, No. 2944; Aghion, P. and P. Howitt (2005), 'Growth with quality-improving innovations: An integrated framework', in P. Aghion and S. N. Durlauf (eds): *Handbook of Economic Growth*, Vol. 1A, Amsterdam, North-Holland, pp. 67–110.

[26] On the debate on working hours and labour supply in Europe versus the US see Blanchard, O. (2004), 'The economic future of Europe', *NBER Working Papers*, No. 10310; and Prescott, E. C. (2004), 'Why do Americans work so much more than Europeans?', *Quarterly Review*, Federal Reserve Bank of Minneapolis, pp. 2–13, July.

Box 8: **Are reforms politically costly?**

Although structural reforms figure high on the European agenda, progress is slow. The main reasons why reforms are blocked or delayed have been analysed in theoretical literature (see e.g. Drazen (2000) for a survey), including that they may be politically costly. Since the gains from reforms often occur with a time lag and are thinly spread across the electorate, while possible costs may materialise in the short run and prompt strong reactions by vocal interest groups, electorally concerned governments may have little incentives to carry out bold reforms. Although this argument is common, analysis verifying whether it is supported by the data is scant.

A recent study sheds some light on this issue, and finds that reforms are not necessarily costly in electoral terms (Buti et al. (2008)). It looks at the history of re-elections of heads of government in 21 OECD countries from 1985 to 2004 and examines whether their re-election was affected by major reforms taking place before elections in the unemployment benefit system, labour taxes, employment protection legislation, product market regulations or retirement schemes. Controls are included for the generally accepted determinants of re-election probabilities, i.e. cyclical factors, inflation, the stance of fiscal policy, the political system (e.g. parliamentary vs. presidential, proportional vs. majoritarian) and the political juncture (e.g. margin of majority of the executive in Parliament, political polarisation between parties in the government and opposition). The study finds that reform in the election or in the preceding year does not significantly affect the probability of re-election of the chief executive (see table below). Voters do tend to reward politicians for improving cyclical conditions, while they tend to dislike an increase in inflation. But the fiscal stance as captured by the change in cyclically-adjusted budget balance, is not statistically significant for re-election probabilities.

Re-election probability and economic reforms - Evidence from probit regressions

Dependent variable[1]: 1 if the identity of the government chief executive does not change after elections.	(1) **Baseline**	(2) **Baseline adding interaction with initial conditions**	(3) **(2) adding interaction with fiscal stance**	(4) **(3) adding interaction with both financial regulation and government size**
Reform dummy[2]	-0.015 [0.09]	0.104 [0.56]	0.13 [0.70]	0.146 [0.78]
Overall index of market rigidity[3] *reform dummy		-0.243 [2.16]**	-0.241 [2.21]**	-0.305 [2.40]**
Cyclical conditions[4] *reform dummy		0.579 [2.81]***	0.591 [2.94]***	0.77 [3.17]***
Change in primary CAB[4] *reform dummy			0.154 [0.86]	
Financial freedom[5] index*reform dummy				0.361 [5.07]***
(Total Current Primary Expenditure / GDP)[6] *reform dummy				0.177 [2.23]**
Change in cyclical conditions[4]	0.075 [2.24]**	0.07 [1.82]*	0.069 [1.76]*	0.116 [2.37]**
Change in inflation[4]	-0.022 [1.65]*	-0.024 [1.78]*	-0.025 [1.82]*	-0.027 [1.72]*
Change in primary CAB[4]	0.086 [1.41]	0.099 [1.87]*	-0.018 [0.12]	0.058 [0.78]
Cyclical conditions[4]	0.035 [1.64]	-0.18 [2.16]**	-0.179 [2.32]**	-0.253 [2.69]***
Political controls[7]		√	√	√
Observations	103	101	101	101

Notes: coefficients are marginal probability effects, robust z statistics in parenthesis (absolute value). *,**, and *** denote, respectively, significant at 10%, 5%, 1%. All interacted variables are standardised.
1/ Constructed using 'Database of Political Institutions', Beck et al. (2001). 2/ 1 if in the past two years at least one of five structural indicators (unemployment benefit, labour taxes, EPL, product market regulations, retirement schemes) improves by more than the median positive change. 3/ Two-year average of the overall index of market rigidities constructed in Duval (2005). The index rises as distortions fall. 4/ Two-year average of output gap, cyclically adjusted primary balance, inflation and their y-o-y change. Source: OECD Economic Outlook, June 2007. 5/ Two-year average of the index of financial freedom. Source: Fraser Institute for Economic Freedom. Higher scores denote higher freedom. 6/ Two-year average of total current primary expenditure, % of GDP. Source: European Commission AMECO database. 7/ In presidential systems, veto players are defined as the president and the largest party in the legislature. In parliamentary systems, veto players are defined as the prime minister and the three largest government parties. Source: Beck et al. (2001).
Source: Commission services

Results change once the reform variable is interacted with the summary index of initial structural conditions. Such interaction make it possible to capture whether the fact that reforms takes place in already 'reformed' countries or in 'unreformed' ones matters in electoral terms. A further interaction considered is with the cyclical conditions, as captured by the level of the output gap. Results in column (2) show that reforms are less politically costly for those countries that are in more urgent need of structural changes and when reforms takes place in 'good times', i.e. when output is above potential.

Colum (3) adds to the specification in (2) the interaction of the reform variable with the fiscal stance. The hypothesis tested is whether re-election is harder when reforms take place in periods of fiscal consolidation. Results show that this does not seem to be the case. The hypothesis tested in column (4) is whether, on top of the factors considered in specification (2), more deregulated financial markets and more effective automatic fiscal stabilisers matter for the impact of reforms on re-elections. It appears that less intrusive financial market regulation increases re-election probabilities when reforms are carried out, which is consistent with the expectation that, by bringing forward the future benefits of structural reform and hence increasing the net benefits of reform in the short run, more developed financial markets help reforming governments to be re-elected. Results also confirm that larger automatic fiscal stabilisers, as captured by the share of primary current expenditure on GDP, also reduce the short-run cost of structural reform, thereby increasing their electoral reward.

These results are broadly in line with the recent reform history in advanced economies: countries with more developed financial markets (e.g. Anglo-Saxon countries) and more effective redistribution by the government (e.g. Nordic countries) scored better than others in terms of reform activism in several areas.

References:

Beck, T., G. Clarke, A. Groff, P. Keefer, and P. Walsh (2001), 'New tools in comparative political economy: The database of political institutions', *World Bank Economic Review*, 15, 165-176.

Brender, A and A. Drazen (2008), 'How do budget deficits and economic growth affect re-election prospects? Evidence from a large cross-section of countries', *NBER Working Paper,* No. 11862.

Buti, M., A. Turrini, P. van den Noord and P. Biroli (2008), 'Defying the 'Juncker curse': Can reformist governments be re-elected?', *European Economy – Economic Papers*, No. 324.

Drazen, A. (2000), 'Political economy in macroeconomics', Princeton University Press, Princeton.

Duval, R. (2005), 'Fiscal positions, fiscal adjustment and structural reforms in labour and product markets', in Wierts,P., S. Deroose, , E. Flores, and A. Turrini (eds.), '*Fiscal Policy Surveillance in Europe*', Palgrave Macmillan.

therefore required as an insurance against shocks with an asymmetric impact. Reducing nominal rigidities, especially in the services sector, will help adjust price competitiveness in a stabilising fashion.[27] The costs associated with the reallocation of labour will have to be reduced, including by reforms of employment protection, and strengthened active labour market policies and incentive-compatible safety nets.[28]

Aside from risk sharing, increased financial integration will help adjustment by facilitating the reallocation of investment across activities and national boundaries. However, financial markets act as accelerators of both benign and perverse developments. Hence, the potential for increased resilience against shocks and consumption smoothing needs to be weighed against the increased risk of contagion, bubbles, and boom-bust cycles associated with enhanced financial integration, issues that require an adequate response in terms of national and supra-national prudential and regulatory policy.

Advancements in terms of risk sharing via financial markets weaken the need for shock absorption via fiscal policy, as households are in a better position to smooth income shocks. The impact of ageing on public budgets will call for an accelerated public debt reduction, and this constraint will bite harder as financial markets become more developed. Against this backdrop, it will be important to correct any pro-cyclical fiscal stance in upturns so as to remove deficit

[27] Dhyne, E., L. J. Alvarez, H. Le Bihan, G. Veronese, D. Dias, J. Hoffmann, N. Jonker, P. Lunnemann, F. Rumler and J. Vilmunen (2006), 'Price changes in the euro area and the United States: Some facts from individual consumer price data', *Journal of Economic Perspectives*, Vol. 20(2), American Economic Association, pp. 171–192, spring.

[28] Recent evidence indicates that the competitiveness channel of adjustment in the euro area reacts less efficiently in the presence of tight product and labour market regulations (Biroli, Mourre and Turrini (2008), 'Market regulation and euro-area adjustment: An empirical assessment', *European Economy — Economic Papers*, forthcoming).

bias over the longer haul and support macroeconomic stability. Improved national-level governance, enhanced fiscal indicators, and effective budgetary surveillance within the framework of the revised Stability and Growth Pact would help in this regard.[29] This will also help to prevent inconsistencies between Member States' fiscal policies and between monetary and fiscal policies at the euro-area level.

Improving the quality and sustainability of budgets

Extensive social safety nets are a characteristic of most countries participating in the euro area. The financing and management of these safety nets is a main driver of the budgets of participating countries in the euro area. It is thus important that they deliver value for money and can be funded without compromising the macroeconomic stability of the country concerned or the area as a whole. With ageing kicking in soon, the window of opportunity for participating countries to put their fiscal house in order without major disruptions is rapidly closing.[30]

On the expenditure side, public funds need to be used more efficiently and the growth-friendliness of programmes needs to be enhanced. The same holds true for taxation, as well as for the interaction between tax and benefit systems which still tend to discourage labour market participation in a number of countries. Overall, while measures have been taken to address the economic and budgetary effects of ageing, in several countries there appears to be room for further efforts to enhance the quality of public expenditure and taxation alongside sustainable fiscal positions.

[29] See e.g. European Commission (2006), 'Public finances in EMU — 2006', *European Economy*, No. 3/2006 and Debrun, X., L. Moulin, A. Turrini, J. Ayuso-i-Casals and M. S. Kumar, 'Tied to the mast? — The role of national fiscal rules in the European Union', *Economic Policy* 23(54), 297-362, April.

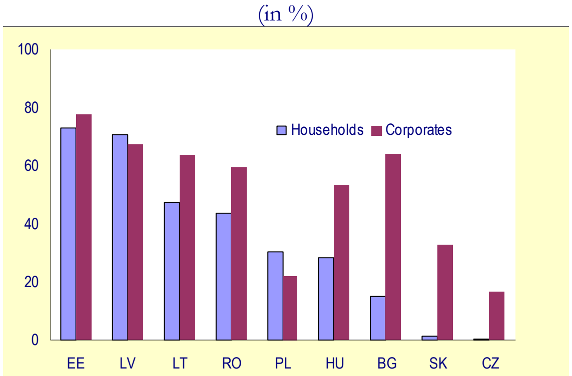
[30] For a comprehensive assessment of fiscal sustainability in the EU see European Commission (2006), 'The long-term sustainability of public finances in the European Union', *European Economy*, No. 4/2006.

Enlarging the euro area smoothly

From a longer-term perspective, all new EU Member States will eventually be members of the euro area. In the process, the composition of the area is changing and becoming more diverse. Although the economies of the new Member States are comparatively small, their entry into the euro area would clearly widen the spectrum of economic development levels across the area. For some time, these countries will continue to grow faster, exhibit higher Balassa-Samuelson-induced inflation, and remain more vulnerable to shocks, overheating and rapid reversals of capital flows.

Against this background, it is important that euro adoption strategies go beyond the achievement of 'nominal' convergence (in respect of the Treaty criteria) at the point of entry. The nominal convergence criteria set out by the Treaty were mainly concerned with preserving price stability, which is an indeed necessary but not sufficient condition for macroeconomic stability. Although these countries have made substantial progress in achieving greater resilience via flexible product and factor markets – arguably more so than some current euro-area members – the first major stress test is still to come.[31]

Graph 16: **Share of foreign currency borrowing in domestic credit, New Member States, 2004-2006**
(in %)



Source: ECOWIN and Central Banks

Challenges ahead of euro adoption are to some extent specific to the exchange rate regime

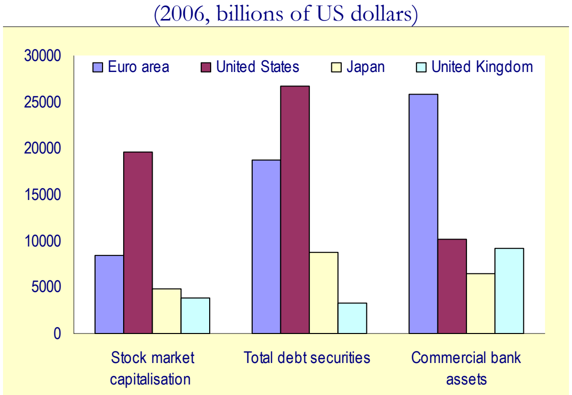
[31] Boeri, T. and P. Garibaldi (2006), 'Are labour markets in the new Member States sufficiently flexible for EMU?', *Journal of Banking and Finance*, No. 30, pp. 1393–1407.

adopted by each candidate euro-area member.[32] While the overall track record of policies in the new Member States with exchange rate pegs has been largely reassuring, the policy responses to the recent overheating episodes have not always been appropriate. Challenges are likely to remain significant, as in some cases these countries have incurred large liabilities denominated in euros, while policy instruments to smooth the unwinding of these positions remain limited (Graph 16). Against this backdrop, fiscal policy needs to be geared towards countering overheating and containing external imbalances, including by increasing private sector incentives to save. Structural and supervisory policies have an important role to play in safeguarding growth potential and macro-financial stability. Those countries that still avail themselves of exchange rate flexibility should gear their policies, including monetary policy, towards macroeconomic and financial stability so as to support a smooth nominal and real convergence process.

Managing the euro-area's international role

The single currency also has a global dimension, which will undoubtedly gain strength as economies and financial systems become more intertwined.[33] The creation of a new economic entity matched in size only by the US, the emergence of the euro as a key international currency, and EMU's powerful effect on the integration and development of the euro-area's financial markets are likely to have far-reaching consequences for the world economy and the international financial system. While the longer-term role of the euro is thus clearly a global one, there are inertial forces that are restraining the euro's international expansion for now. The US offers a broad and deep financial market for international investors and will continue to benefit form rapid expansion in its potential output due to demographic reasons. Furthermore, the euro-area's ability to keep pace with global financial market developments may be somewhat constrained by the European regulatory and supervisory patchwork. But portfolio diversification considerations, the euro-area's prudent policy framework and the gradual integration and broadening of its financial markets will continue to support a rising international use of the euro in the future.

Graph 17: **Selected indicators of capital market size,** (2006, billions of US dollars)



Source: IMF, Global Financial Stability Report, September 2007.

An enhanced international role of the euro brings both benefits and costs. On the one hand, greater use of the euro by non-euro-area residents brings seigniorage and competitive advantages for euro-area exporters and financial institutions.[34] On the other, it could also lead to a possible increase in macroeconomic volatility.[35] In the medium term, however, the advantages of having an international currency are likely to outweigh the costs.

[32] See. e.g. Schadler, S., P. Drummond, L. Kuijs, Z. Murgasova and R. van Elkan (2005), 'Adopting the euro in central Europe: Challenges of the next step in European integration', *IMF Occasional Papers*, No. 234.

[33] In some empirical assessments, the euro is projected to replace the US dollar as the main international currency (Chinn, M. and J. Frankel (2005), 'Will the euro eventually surpass the dollar as leading international reserve currency?', *NBER Working Paper Series*, No. 11510, July). A recent comprehensive assessment is contained in Papaioannou, E. and R. Portes (2008), 'The International Role of the Euro: a Status Report', *European Economy – Economic Papers*, 317.

[34] An aspect that has been discussed in recent debates is the so-called 'exhorbitant privilege', namely the premium on the returns on net foreign assets benefiting the country issuing the leading international currency (Gourinchas, P. O. and H. Rey (2007), 'From world banker to world venture capitalist: US external adjustment and the exorbitant privilege', in R. Clarida (ed.): *G7 current account imbalances: Sustainability and adjustment*, Chicago, IL: The University of Chicago Press).

[35] See e.g. Wyplosz, C. (1997), 'An international role for the euro?', report prepared for the European Capital Market Institute (ECMI).

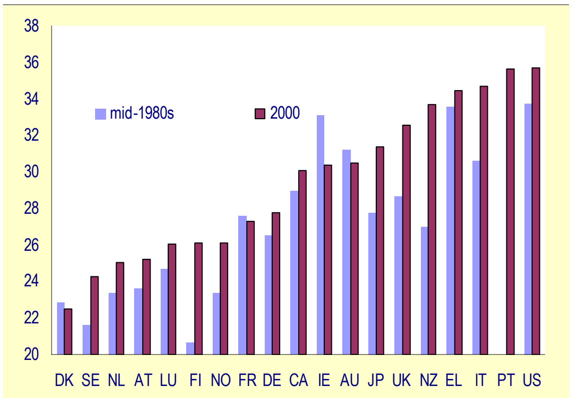
The euro also brings benefits to the global economy as a whole. By promoting macroeconomic and financial stability inside the euro area, EMU works in favour of global stability, particularly in neighbouring regions. By providing deep and liquid euro-denominated financial instruments, the euro facilitates international risk sharing and consumption smoothing not only among euro-area countries but also among third countries.[36] At the same time, a wider use of the euro worldwide may amplify the impact of euro-area developments on the rest of the world, which increases the relevance of macroeconomic policy decisions in the euro area for financial markets worldwide. The international status of the euro and the increasing global relevance of euro-area economic developments thus bring with them new global surveillance responsibilities and raise the issue of how to ensure adequate formation, representation, and communication of common euro-area positions in the main multilateral fora.

3. Exploiting policy synergies

Most of the policy objectives that appear worth pursuing in the context of the euro area – including boosting growth, enhancing the adjustment capacity and ensuring macroeconomic stability – are not mutually conflicting. Indeed some are even mutually reinforcing. Policies aimed at raising potential growth would also help to ensure that public finances evolve on a stable footing. Reforms aimed at improving price signals in goods and factor markets and at reducing the costs of reallocating labour across economic activities and regions will contribute to employment and productivity growth and also make euro-area economies more resilient to shocks. Improved supervision and regulation of financial markets would limit the risks of boom-bust dynamics, thus contributing to macroeconomic stability in euro-area incumbents, and would at the same time ease some of the trade-offs likely to arise on the convergence path for the countries that have yet to join the euro.

A concern may be that the price to pay to accelerate the growth potential is a more unequal distribution of income. Income distributions have become more unequal in most countries since the 1980s (Graph 18). This rise in income inequality – and the concomitant change in the distribution of wealth – is commonly attributed to the observed shift of labour demand from unskilled to skilled workers associated with globalisation and skill-biased technological progress. Such tendencies are likely to get stronger in the future. However, in view of the diversity of national experiences, both in terms of timing and magnitude of the changes in income distribution, domestic institutional factors must also play a role.[37] Labour market and welfare institutions have had a key role in transmitting trade and technology shocks to relative wages and unemployment rates.[38]

Graph 18: **Gini indexes of income**



Source: OECD

Although possible tensions between structural reforms and income distribution are not necessarily ruled out, such tensions can be contained if policies are appropriately designed and certain framework conditions are in place.

[36] Gerlach, S. and M. Hoffmann (2008), 'The impact of the euro on international stability and volatility', *European Economy – Economic Papers*, No. 309.

[37] Atkinson, A. (2003), 'Income inequality in OECD countries: Data and explanations', *CESifo Economic Studies*, Vol. 49(4), pp. 479–513.

[38] Atkinson, A. (2000), 'The changing distribution of income: Evidence and explanations', *German Economic Review*, Vol. 1(1), pp. 3–18; Gottschalk, P. and T. M. Smeeding (1997), 'Cross-national comparisons of earnings and income inequality', *Journal of Economic Literature*, Vol. 35, pp. 633–687, June; Checchi, D. and C. Garcia-Peñalosa (2005), 'Labour market institutions and the personal distribution of income in the OECD', *CESifo Working Papers*, No. 1608.

Some EU countries show a stronger performance in terms of both growth and employment on the one hand and inequality and poverty on the other, while other countries perform poorly on both scores.[39] This suggests there is room for improving economic performance without compromising income distribution by improving the efficiency of institutions. It needs also be taken into account that increased inequality associated with a number of labour market reforms is mainly transitory, since it is related to the hardship of job reallocation.

Moreover, some growth-friendly reforms may create positive synergies with income distribution rather than a trade-off. Policies to increase skills help to contain the dispersion of income by leading to a lower wage differentials between skilled and unskilled labour. Policies aimed at reducing long-term unemployment reduce inequality as well. Measures aimed at reducing obstacles to financial market integration help to ease credit constraints facing low-income earners.[40]

Finally, it needs to be stressed that a strong growth potential is a pre-requisite to underpin the comparatively generous social welfare systems present in most euro-area economies. In this respect, growth-friendly reforms and income distribution are not at odds in the longer term.

4. Reaping the benefits of policy co-ordination

In general terms, there is a rationale for economic policy coordination wherever the effects of policies in one country spill over to other countries. Economic policy spillovers in EMU differ from those arising under flexible exchange rate arrangements. Members of EMU share a large amount of 'club goods', including monetary stability, interest rates, the external exchange rate and the current account position.[41] The existence of club goods raises the issue of free-riding in monetary unions, where some members may lack incentives to fully and voluntarily contribute to the effective functioning of the monetary union.

The Treaty and the Stability and Growth Pact provide the institutional framework to deal with free-riding in the fiscal domain. However, the proper functioning of a monetary union also depends on other club goods, most prominently: (i) the efficiency of intra-area adjustment in the absence of an internal exchange rate mechanism, and (ii) the ability to reach common positions in global macro-financial policy making and pursue them effectively.[42] On these aspects the policy co-ordination of EMU appears to be less equipped to deal with free-riding.

With regard to intra-area adjustment, the current EMU set-up refrains from placing specific constraints on national policy-makers other than that policies should be conducted in accordance with 'the principle of open market economy with free competition' and should be considered as matters of 'common concern' to be coordinated 'within in the Council' (EC Treaty Article 99). The institutional arrangements for coordination of adjustment-friendly structural policies have evolved considerably, in particular with the re-launch of the Lisbon strategy. Even so, less weight is attached to coordination of structural reforms than is given to the provisions on fiscal policy in the EMU set-up despite the fact that it is in euro-area countries' common interest that partner countries carry out reforms that improve their adjustment capacity. Indeed, as shown in the model simulations in Graph 19, should nominal rigidities be reduced in the euro area spillovers from asymmetric shocks would be reduced. Also, the current set-up of economic coordination in EMU is not strongly equipped to ensure consistency among national policies

[39] Sapir, A. (2006), 'Globalisation and the reform of European social models', *Journal of Common Market Studies*, Vol. 44, pp. 369–390.

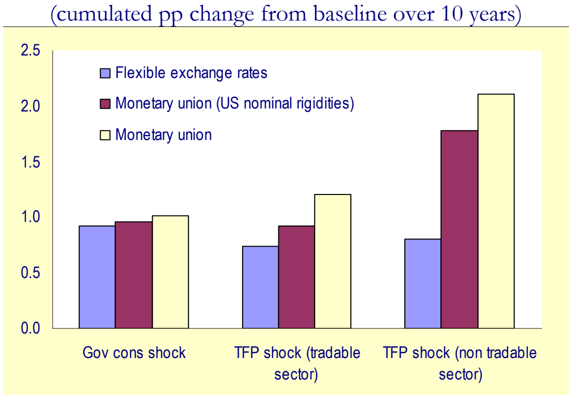
[40] Levine, R. (2005), 'Finance and growth: Theory and evidence', in P. Aghion and S. Durlauf (eds): *Handbook of economic growth*, Elsevier Science.

[41] See Cohen, D. and C. Wyplosz (2006), 'European monetary union: An agnostic evaluation', *CEPR Discussion Papers*, No. 306. and Jacquet, P. and J. Pisani-Ferry (2001), *Economic policy coordination in the eurozone: What has been achieved? What should be done?*, London: Centre for European Reform.

[42] Von Hagen, J. and S. Mundschen (2003), 'The functioning of economic policy coordination', in Buti, M. and A. Sapir (eds.), *EMU and Economic Policy in Europe – The Challenge of the Early Years*, Edward Elgar.

with direct implications for competitiveness. In this respect, while in the European Exchange Rate Mechanism (ERM) that preceded EMU, exchange rate realignments were perceived as a common concern and were subject to commonly agreed principles, no similar framework is available in EMU to discuss internal devaluations and other policies with a direct bearing on competitiveness.

Graph 19: **Cumulated spillovers under alternative exchange rate regimes**
(cumulated pp change from baseline over 10 years)



Source: Commission services.

Regarding the role of the euro area in global macro-financial policy making, although an increasing degree of co-ordination is already taking place among euro-area countries, including in the realm of multilateral consultations on global imbalances, co-ordination gains are still far from being fully exploited.

Overall, although there could also be tendencies that raise the costs of coordination, such as the increasing number of member countries and their diversity, the ongoing global trends will most likely raise the need of fully reaping the unexploited co-ordination gains in EMU. In particular, enhanced co-ordination will be required to foster reforms that improve growth and adjustment, to endow the euro area with a surveillance framework aimed at ensuring that macroeconomic policies are consistent with adjustment needs, to ensure orderly financial market developments, and to raise the ability of the euro area to speak with one voice in multilateral fora.

5. Concluding remarks

In its first ten years the policy agenda of EMU has pursued macroeconomic stability via the anchoring of inflation expectations and safeguarding fiscal discipline. This agenda has been supported by EU policies to promote structural reforms in product, labour and financial markets and address divergences in macroeconomic performance across countries. Although progress has been made on all these policy objectives, further progress is needed.

The experience of the first ten years has shown that a call on macroeconomic policy discipline, and delivery on that goal, does not automatically entail progress with structural reform and market integration, nor does it ensure high quality and sustainable public finances in the longer run, or secure a smooth enlargement and a strong global presence of the euro area. Yet these are necessary conditions for robust growth, flexible adjustment to disturbances and the smooth operation of EMU at large. This – coupled with the pressing challenges of globalisation, scarce natural resources, climate change and population ageing – calls for improved co-ordination of economic policies, further progress with structural reforms, a stronger global role for the euro area and an unwavering commitment by Member States to achieving these goals. The fact that the effects of these global trends are already being felt in high energy, food and commodity prices, financial turbulence and global exchange rate adjustment only underscores the importance of timely action.

In order to address these challenges and prepare EMU for the future, the Commission has presented a three-pronged policy agenda in its EMU@10 Communication and Report, based on a domestic pillar, an external pillar and initiatives to strengthen EMU's economic governance. This policy agenda is presented in more details in the next section.

EMU@10

III. A three-pillar policy agenda for the second decade

In order to address the challenges discussed in the previous section and prepare EMU for the next decade and beyond, the Commission has presented a broad three-pillar policy agenda. The first pillar is domestic. It aims to deepen fiscal policy co-ordination and surveillance, to broaden macroeconomic surveillance in EMU beyond fiscal policy and to better integrate structural reform in overall policy co-ordination within EMU. This should enhance the quality of public finances, entail a more effective implementation of the preventive arm of the SGP and help to identify emerging macroeconomic imbalances at an earlier stage. It should also help to remove the remaining barriers to product market integration, improve the functioning of labour markets, foster EU financial integration and enhance financial stability arrangements. The second pillar concerns the external dimension of the euro. It aims to enhance the euro-area's role in global economic governance by consolidating its external representation, with the ultimate objective of a single seat in the relevant international fora. The third pillar deals with governance issues. To ensure that EMU functions effectively it is necessary to fully involve the ECOFIN Council. ECOFIN remains the policy-setting and legislative forum for issues relating to EMU and much of the progress with the proposed policy agenda for the euro area will depend upon wider support in ECOFIN. But it is also crucial to develop the agenda and the debates in the Eurogroup to deepen and broaden policy coordination and surveillance in the euro area.

The experience of the first decade of EMU, while overall very successful, reveals a number of shortcomings that need to be addressed. It will be necessary to consolidate the hard-won macroeconomic stability while: (a) raising potential growth and safeguarding and increasing the welfare of euro-area citizens; (b) ensuring a smooth adjustment capacity as EMU expands to take in new members; and (c) successfully protecting the interests of the euro area in the global economy. Importantly, these efforts will have to be made in a global environment that has changed considerably since the euro was launched, and failure to do so will be much more costly now.

To address these challenges, the Commission has proposed a broad policy agenda based on a domestic pillar, an external pillar and initiatives to strengthen EMU's system of governance.

1. The domestic policy agenda: better co-ordination and surveillance

Deepening and broadening surveillance

The corrective arm of the Stability and Growth Pact (SGP) should continue to be applied rigorously and surveillance under the SGP's preventive arm should be improved. Fiscal policy coordination should better guide national budgetary behaviour over the whole cycle, i.e. in both good and bad times. Budgetary surveillance should be deepened to cover two main areas:

(i) *securing the sustainability of public finances for the benefit of future generations*. At the national level, the adoption of medium-term fiscal frameworks could go a long way towards achieving stable and sustainable public finances. To be effective, such frameworks should encompass well-designed expenditure rules, which would allow the automatic fiscal stabilisers to operate within the limits of the SGP while attuning the composition of public expenditure to the structural and cyclical needs of the economy. At the euro-area level increased attention should be put on monitoring public debt developments, while medium-term budgetary objectives should be strengthened to address implicit liabilities. Moreover, long-term budgetary projections which identify the impact of ageing on public finances can support the preparation of national sustainability strategies and promote measures to reform pension and health systems and increase employment rates.

(ii) *enhancing the quality of public finances*. In other words, ensuring better value for public money, by channelling public expenditure and taxation systems towards growth-friendly and competitiveness-enhancing activities. Reforms of social expenditure programmes that offer better income protection while strengthening incentives to work – the flexicurity approach – would also greatly help to enhance the sustainability and quality of public finances while ensuring that budgets support macroeconomic stability.

But beyond budgetary surveillance, there is a clear need to broaden surveillance to address macroeconomic imbalances. Developments within Member States such as the growth of current account deficits, persistent inflation divergences or trends of unbalanced growth need to be monitored given that the occurrence of spillover effects and the growing interdependence of euro-area economies mean these developments represent a concern not just for the country in question but for the euro area as a whole. The evidence of the first ten years of EMU indicates that while market integration, particularly in financial services, is beneficial overall for EMU – as it can help absorb macroeconomic disturbances by providing risk-sharing opportunities and fostering reallocation of resources – it can also, if not accompanied by appropriate policies, amplify divergences among the participating countries. While some of these divergences can be benign – reflecting the catching-up process or even normal adjustment – they may also be harmful and the result of inefficient adjustment. In this case, enhanced surveillance would help the affected countries to devise early responses before divergences become entrenched.

Finally, a broader surveillance of euro-area candidate countries, akin to that proposed for current euro-area members, will be crucial to help them prepare for the challenges of sharing a single currency. Many future euro-area members are experiencing large capital inflows (reflecting expectations of continued fast income growth) and rapidly developing financial sectors, both of which can boost credit (typically from a low base) and result in external imbalances. Currently surveillance of prospective euro-area countries takes place via the assessment of Convergence Programmes. But there is scope to provide stronger policy guidance and closer surveillance of economic developments in particular for the countries participating in the Exchange Rate Mechanism (ERM) II framework, which is both an element of the euro adoption criteria and an instrument to foster sustainable nominal and real convergence. This should not mean imposing any additional constraints on euro-area entry.

Surveillance must build on the existing instruments. The key instruments for fiscal policy surveillance and economic policy coordination are clearly anchored in the Treaty and the SGP. The enforcement of the corrective arm of the SGP will remain a key pillar in dissuading non-compliance with the Treaty. The SGP provides for the definition and assessment of medium-term budgetary strategies through Council opinions on national Stability Programmes. Article 99 of the Treaty states that "Member States shall regard their economic policies as a matter of common concern" and "shall coordinate them within the Council". The euro-area and country-specific recommendations of the Lisbon process are key instruments for guidance and surveillance. There is, however, scope to improve the way such instruments are used. The analysis of the first 10 years reinforces the case for strengthening the preventive part of the SGP, as endorsed by the ECOFIN Council, to support the achievement of sustainable budgetary policies and address broader issues which may affect the macroeconomic stability of a country and the overall functioning of EMU. These Treaty-based instruments are complemented by the Medium-Term Budgetary Review process undertaken by the Eurogroup in the spring of each year. While it has so far focused on budgetary surveillance, this peer review mechanism should broaden its scope to make the Treaty-based surveillance more effective.

Better integrating structural policies in the co-ordination process

The euro area has a special interest in the success of structural reform. Stepping up reforms – of course welcome in the EU as a whole – is an absolute must for the euro area. Importantly, improved market responses will pay a double dividend – by boosting growth in living standards over the longer haul while allowing better adjustment to shocks and fostering macroeconomic stability. Empirical evidence from our analysis indicates that structural reforms in countries sharing the single currency have higher "multipliers" than elsewhere: that is, those countries undertaking structural reforms can accrue more benefit while those falling behind may pay a higher price for their inaction. The Lisbon Strategy for Growth and Jobs, which has been instrumental in putting structural reform on the policy agenda, provides the basis for identifying the most pressing areas for action through Guideline No. 6 on the euro area and the euro-area-specific recommendations. In a partnership approach between the Commission and the Member States, the Lisbon Strategy forms the basis for steering the reform process in both the euro area and the individual countries.

Removing remaining barriers to product market integration is essential for a well-functioning euro area. Yet despite the boost given by EMU and the Single Market Programme to the creation of more open and competitive economies, low productivity growth and entry barriers, especially in services, are still hampering efficient adaptation to changing economic circumstances in the euro area and are keeping up pressure on prices. Innovation and technology diffusion, important elements for enhancing both competition and productivity, are lagging behind in euro-area member states. The market monitoring system proposed in the Single Market Review should be used to specifically target these shortcomings.

Better-functioning labour markets are needed in the euro area to underpin adjustment in a globalised economy and raise growth potential in the face of ageing populations. Greater wage flexibility and differentiation across industries, occupations and regions, and investment in human capital are instrumental in boosting competitiveness and allowing the smooth reallocation of resources in the event of shocks. Numerous reforms to raise labour utilisation have been undertaken in the framework of the Lisbon Strategy – and have paid off. However, progress has been uneven across countries and should therefore remain at the core of reform strategies in the next decade. Reforms of social expenditure programmes and active labour market policies should aim to offer better income protection while strengthening incentives to work.

The euro area can draw comparatively large benefits from promoting EU financial integration. Significant progress has been made in integrating EU financial markets but further efforts are required to enhance the efficiency and liquidity of euro-area financial markets. This would facilitate economic adjustment through risk sharing and promote a more uniform transmission of the single monetary policy across the euro area. In particular, increased effort is required to promote the cross-border provision of retail financial services, to improve the efficiency of corporate and government bond financing and ease regulatory and supervisory costs for financial intermediaries operating in a multi-jurisdictional environment. Given the shared responsibility of the Eurosystem and participating Member States to safeguard financial stability in the euro area as a whole, there is a growing need for stronger cross-border cooperation in arrangements for crisis prevention, management and resolution as financial integration proceeds. In light of these specific efficiency and stability considerations and taking on board the lessons of the current financial turmoil, the euro area should take a strong role in fostering the EU agenda for financial integration and in enhancing EU financial stability arrangements.

To reap the full potential of EMU, there is therefore a need to strengthen the incentives to pursue reform in the euro area. Integrating structural policies in the euro area coordination process can provide support via three avenues:

- The recommendations to the euro area as a whole together with the country-specific recommendations made within the Integrated Guidelines of the Lisbon Strategy provide the backbone for the coordination of structural reforms; a closer monitoring of their implementation needs to be organised.

- The reform of the SGP in 2005 created the possibility, when assessing progress towards the medium-term budgetary objectives, to take account of structural reforms that are fiscally costly in the short run but yield longer-term gains in terms of growth and fiscal sustainability. To ensure compliance with the commitments enshrined in the SGP, a peer review mechanism could be established based on the analytical framework developed under the Lisbon Strategy and ex ante information provided by Member States.

- To achieve a better sequencing of reforms, particular priority should be given to improving the functioning of financial markets. This would not only have favourable effects on growth and adjustment, but would also help boost the incentives for other structural reforms to follow by bringing forward their longer-term benefits and allowing capital to flow to the new investment opportunities generated by these structural reforms.

2. *The external policy agenda: enhancing the euro area's international role*

The international status of the euro brings advantages, responsibilities and risks. It helps develop the financial industry in Europe, yields seignorage gains from the use of the euro as a reserve currency and reduces exposure to exchange rate volatility as pricing and invoicing in euros develops. But the sheer size of the euro area means that policy decisions and economic developments within EMU are felt elsewhere, not least because global financial markets are acting as an ever-stronger international transmission channel. And there are risks, as the growing international status of the euro exposes the euro area to disruptive portfolio shifts between key international currencies and asset classes. All in all, the growth of the euro as an international currency and the combined strength of the euro-area economy have changed the rules of the game for the members of EMU and for their international partners.

The euro area must therefore build an international strategy commensurate with the international status of its currency. Following a successful first decade, the euro area, which already provides a stability anchor for its neighbours, is now called upon to develop a clear and all encompassing strategy on international economic and financial affairs. It has to play a more active and assertive role both in multilateral fora and through its bilateral dialogues with strategic partners. It has to improve coordination and define common positions and – when appropriate – common terms of reference on all these issues. It has to speak with a single voice on exchange rate policies and assume its responsibilities in financial stability and macroeconomic surveillance issues. The risk that the unwinding of global imbalances disproportionately harms the competitiveness of the euro area and its members is adding to these needs.

The most effective way for the euro area to align its influence with its economic weight is by developing common positions and by consolidating its representation, ultimately obtaining a single seat in the relevant international financial institutions and fora. This is an ambitious aim and progress on the external agenda will depend first and foremost on a more effective system of euro-area governance. Even though the EU and euro area are often seen by other countries as over-represented in international organisations (in terms of both seats and voting power), the euro area still punches below its economic weight in international fora. Consolidating the euro-area's representation would strengthen its international negotiating power and reduce the costs of international coordination, both for the euro area and for its key partners. It would also free up much needed space for emerging market countries to increase their participation in international financial institutions.

3. *Promoting effective governance of EMU*

EMU's system of economic governance must rise to the challenges facing the euro area. That said, the current division of responsibility between the institutions and instruments that govern the conduct of economic policy in EMU is sound overall. Nevertheless, there is a clear need to adapt institutions and practices to tackle the emerging policy challenges.

A strong involvement of all EU Member States within the ECOFIN Council is key to ensuring that EMU functions effectively. From the outset the ECOFIN Council has been the forum for economic policy decision-making in the EU and, in view of the evolving overlap between the euro area and the EU, it should remain centre stage in EMU's system of economic governance by integrating EMU issues more thoroughly in its work. In particular, it could push for a more consistent approach within its own fields of competence – i.e. macroeconomic policy, financial markets and taxation – so as to ensure positive synergies between them. The current Treaty provides ample scope for more comprehensive coordination and surveillance along these lines across the whole EU.

The Eurogroup should continue to serve as a platform for the deepening and broadening of policy coordination and surveillance in EMU. In terms of fiscal surveillance, ex ante coordination of budgetary policy through the Mid-Term Budgetary Review should be geared to guiding fiscal behaviour over the cycle as a means to address any pro-cyclical bias. In view of the ageing challenge, a major task is to increase the effectiveness of the preventive arm of the SGP in fostering the achievement of ambitious medium term objectives. To avoid the build-up of imbalances and excessive divergences between euro area countries, the Eurogroup should exchange views, develop policy guidelines and monitor Member States' compliance in areas that foster adjustment capacity and macroeconomic stability. “Peer reviews” – multilateral discussions on relevant developments in one or several countries – should be strengthened to encourage ministers of finance to consider national issues and policies within a euro-area perspective. Moreover, the Eurogroup should devote greater attention to monitoring the euro-area Lisbon recommendations in order to increase potential growth and strengthen competitiveness through structural reforms.

The Commission should play a strong, supportive role to ensure the effective functioning of EMU. It is called upon to foster the coordination of policies while internalising the EMU dimension in its policy proposals. It should step up its fiscal and macroeconomic surveillance and promote further economic and financial integration. In its surveillance role, it should deepen the assessment of economic and financial developments of the euro area, focusing in particular on the spillovers of national policy measures. Work to improve the accuracy of cyclical and structural fiscal indicators should continue, in cooperation with the Member States. As to the international agenda, the Commission needs to enhance its role in international dialogues and fora. In sum, the Commission must support efforts to improve the functioning of EMU both domestically and internationally by assuming the responsibilities assigned to it by the Treaty as the guardian of sound economic policies. To this end it should endeavour to better exploit the instruments provided by the Treaty.

EMU's governance system must ensure that euro-area enlargement continues smoothly. Over the next decade, the euro area is set to expand to encompass most current EU Member States and ensuring that this process proceeds appropriately will safeguard the effective functioning of the euro-area economy in the future. During participation in ERM II, countries should capitalise on the environment of enhanced macroeconomic stability to adopt sound macroeconomic and structural policies. As specified in the Treaty, the Commission should provide a regular, fair assessment of sustainable progress in the convergence process. The Eurogroup and ECOFIN in turn have a special responsibility to build trust, survey economic developments and provide the necessary guidance in terms of the policies and reforms necessary for prospective euro-area members' nominal and real convergence.

There is also a need to improve the dialogue concerning EMU among the EU institutions and with the public at large. The Commission should develop its dialogue and consultation with the European Parliament in particular, as well as other European and national stakeholders. In a similar vein, the Eurogroup should pursue dialogues with the ECB, the European Parliament and the social partners in the euro area. All these institutions, starting with the Commission, should improve communication on EMU issues to the wider public. In particular, there is a need to better explain the euro's significant macro- and microeconomic advantages, such as its role as a protective shield during the recent financial turmoil, and the significant, beneficial contribution of economic policies in EMU.

4. Conclusion

Achieving this policy agenda swill go a long way towards meeting the challenges that the euro area and the global economy are facing. It will also bring important positive benefits for all EU members:

- EMU remains a milestone of EU integration. Although its objectives and achievements are predominantly economic, EMU has never been solely an economic project. From the outset EMU was conceived as a crucial step in the process of EU integration. This role has become even stronger since the EU's enlargement from 15 to 27 Member States since 2004, with all newly acceded EU member countries preparing for euro adoption. The prospect of euro-area accession has been one of the main drivers of those countries' convergence with the EU's standard of living.

- A well-functioning EMU is a major asset for the EU as a whole, not least since the overwhelming majority, if not all, of EU countries will eventually become members of EMU. A thriving euro-area economy will contribute to the wealth and dynamism of the whole EU, reinforcing public support for EU integration both within and outside the euro area.

- A strong EMU will also foster the EU's leadership in the global economy. A well-functioning euro area lays the foundations for EMU to play a strong role externally, both in the macroeconomic sphere and in the area of global financial supervision and regulation. Proving its ability to strengthen the euro area's external role and assume its global responsibilities will have positive spin-offs for other policy areas where the EU aspires to global leadership, e.g. sustainable development, development aid, trade policy, competition and human rights.

IV. Recent DG ECFIN publications

1. Policy documents

EUROPEAN ECONOMY. No. 1. 2008
Spring economic forecast 2008-2009
http://ec.europa.eu/economy_finance/publications/publication_summary12532_en.htm

EUROPEAN ECONOMY. No. 2. 2008
EMU@10:successes and challenges after 10 years of Economic and Monetary Union
http://ec.europa.eu/economy_finance/publications/publication_summary12680_en.htm

EUROPEAN ECONOMY. No. 3. 2008
Convergence Report 2008
http://ec.europa.eu/economy_finance/publications/publication_summary12576_en.htm

EUROPEAN ECONOMY. OCCASIONAL PAPERS. No. 33. June 2007
Main results of the 2007 fscal notifications presented by the candidate countries
http://ec.europa.eu/economy_finance/publications/publication_summary5954_en.htm

EUROPEAN ECONOMY. OCCASIONAL PAPERS. No. 34. June 2007
Guiding principles for product market and sector monitoring
http://ec.europa.eu/economy_finance/publications/publication_summary5923_en.htm

EUROPEAN ECONOMY. OCCASIONAL PAPERS. No. 35. November 2007
Pensions schemes and projection models in EU-25 Member States
http://ec.europa.eu/economy_finance/publications/publication_summary10175_en.htm

EUROPEAN ECONOMY. OCCASIONAL PAPERS. No. 36. December 2007
Progress toward meeting the economic criteria for accession: the assessments of the 2007 Progress Reports
http://ec.europa.eu/economy_finance/publications/publication_summary10568_en.htm

EUROPEAN ECONOMY. OCCASIONAL PAPERS. No. 37. March 2008
The quality of public finances. Findings of the EPC Working Group (2004-2007)
http://ec.europa.eu/economy_finance/publications/publication_summary12186_en.htm

2. Analytical documents

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 320.
Martin Larch and Alessandro Turrini (European Commission)
Received wisdom and beyond: Lessons from fiscal consolidation in the EU
http://ec.europa.eu/economy_finance/publications/publication_summary12423_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 321.
Richard Baldwin (Graduate Institute, Geneva), Virginia DiNino (Bank of Italy), Lionel Fontagné (Paris School of Economics, Université Paris I), Roberto A. De Santis and Daria Taglioni (ECB)
Study on the Impact of the Euro on Trade and Foreign Direct Investment
http://ec.europa.eu/economy_finance/publications/publication_summary12592_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 322.
G. Russell Kincaid (International Monetary Fund)
Adjustment Dynamics in the Euro Area – A Fresh Look at the Role of Fiscal Policy Using a DSGE Approach
http://ec.europa.eu/economy_finance/publications/publication_summary12598_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 323.
Alessandro Turrini (European Commission)
Fiscal policy and the cycle in the Euro Area: The role of government revenue and expenditure
http://ec.europa.eu/economy_finance/publications/publication_summary12602_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 324
Marco Buti, Alessandro Turrini, Paul Van den Noord (European Commission), and Pietro Biroli (Rodolfo Debenedetti Foundation)
Defying the 'Juncker Curse': Can Reformist Governments Be Re-elected?
http://ec.europa.eu/economy_finance/publications/publication_summary12588_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 325.
Lars Jonung and Jarmo Kontulainen, (European Commission)
Growth and income distribution in an integrated Europe: Does EMU make a difference?
http://ec.europa.eu/economy_finance/publications/publication_summary12676_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 326
Marco Buti and Mario Nava (European Commission)
"Constrained Flexibility" as a tool to facilitate reform of the EU budget
http://ec.europa.eu/economy_finance/publications/publication_summary12664_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 327.
CASE (Centre for Social and Economic Research)
The economic aspects of the energy sector in CIS countries
http://ec.europa.eu/economy_finance/publications/publication_summary12684_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 329.
Yung Chul Park (Korea University) and Charles Wyplosz (The Gaduate Institute, Geneva and CEPR)
Monetary and Financial Integration in East Asia: The Relevance of European Experience
http://ec.europa.eu/economy_finance/publications/publication_summary12720_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 330
Petra M. Geraats, University of Cambridge
ECB Credibility and Transparency
http://ec.europa.eu/economy_finance/publications/publication_summary12716_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 331.
Laura González Cabanillas and Eric Ruscher (European Commission)
The Great Moderation in the euro area: What role have macroeconomic policies played?
http://ec.europa.eu/economy_finance/publications/publication_summary12755_en.htm

3. Regular publications

Euro area GDP indicator (Indicator-based forecast of quarterly GDP growth in the euro area)
http://ec.europa.eu/economy_finance/db_indicators/db_indicators9239_en.htm

Business and Consumer Surveys (harmonised surveys for different sectors of the economies in the European Union (EU) and the applicant countries)
http://ec.europa.eu/economy_finance/db_indicators/db_indicators8650_en.htm

Business Climate Indicator for the euro area (monthly indicator designed to deliver a clear and early assessment of the cyclical situation)
http://ec.europa.eu/economy_finance/db_indicators/db_indicators8650_en.htm

Key indicators for the euro area (presents the most relevant economic statistics concerning the euro area)
http://ec.europa.eu/economy_finance/db_indicators/db_indicators9237_en.htm

Monthly and quarterly notes on the euro-denominated bond markets (looks at the volumes of debt issued, the maturity structures, and the conditions in the market)
http://ec.europa.eu/economy_finance/publications/publ_list2607.htm

Price and Cost Competitiveness
http://ec.europa.eu/economy_finance/db_indicators/db_indicators8642_en.htm

V. Key indicators for the euro area

1 Output		2005	2006	2007	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08
Industrial confidence [1.1]	Balance	-7.2	2.2	4.4	1.6	1.1	0.2	0.1	-2.0	-2.2
Industrial production [1.2]	mom % ch	1.4	4.0	3.5	0.1	0.7	0.3	-0.2	--	--
		2005	2006	2007	06Q4	07Q1	07Q2	07Q3	07Q4	08Q1
Gross domestic product [1.3]	qoq. % ch	1.6	2.7	2.6	0.8	0.7	0.3	0.7	0.4	0.7
2 Private consumption		2005	2006	2007	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08
Consumer confidence [2.1]	Balance	-13.9	-9.1	-4.9	-8.7	-11.5	-12.0	-12.1	-12.4	-14.7
Retail sales [2.2]	mom % ch	1.2	1.6	1.0	0.1	0.5	-0.2	-0.4	--	--
		2005	2006	2007	06Q4	07Q1	07Q2	07Q3	07Q4	08Q1
Private consumption [2.3]	qoq. % ch	1.6	1.8	1.5	0.5	0.1	0.6	0.5	-0.1	--
3 Investment		2005	2006	2007	06Q4	07Q1	07Q2	07Q3	07Q4	08Q1
Capacity utilization [3.1]	%	81.3	83.0	84.2	83.9	84.4	84.8	84.1	84.0	83.9
Gross fixed capital formation [3.2]	qoq. % ch	3.1	5.3	4.9	1.4	1.3	0.0	1.1	0.8	--
Change in stocks [3.3]	% of GDP	0.1	0.3	0.4	0.0	0.5	0.2	0.4	0.3	--
4 Labour market		2005	2006	2007	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08
Unemployment [4.1]	%	8.8	8.3	7.4	7.2	7.1	7.1	7.1	--	--
		2005	2006	2007	06Q4	07Q1	07Q2	07Q3	07Q4	08Q1
Employment [4.2]	yoy % ch	0.9	1.6	1.8	1.6	1.8	1.7	1.9	1.7	--
Shortage of labour [4.3]	%	2.3	3.8	6.2	5.0	5.1	6.0	6.5	7.2	7.6
Wages [4.4]	yoy % ch	2.8	2.5	2.8	2.1	2.3	2.8	2.6	2.9	--
5 International transactions		2005	2006	2007	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08
Export order books [5.1]	Balance	-15.6	-1.1	3.5	1.2	-1.8	-2.4	-1.9	-4.6	-6.2
World trade [5.2]	Index	158.5	173.4	185.0	187.1	193.8	191.3	189.1	--	--
Exports of goods [5.3]	Bn. EUR	1236.8	1383.4	1497.9	123.8	132.2	133.0	129.1	--	--
Imports of goods [5.4]	Bn. EUR	1227.4	1397.1	1473.4	125.6	133.5	131.5	131.5	--	--
Trade balance [5.5]	Bn. EUR	9.5	-14.4	22.3	-1.7	-1.3	1.6	-2.4	--	--
		2005	2006	2007	06Q4	07Q1	07Q2	07Q3	07Q4	08Q1
Exports of goods and services [5.6]	qoq. % ch	4.7	7.9	6.0	3.3	0.8	0.9	2.0	0.6	--
Imports of goods and services [5.7]	qoq. % ch	5.4	7.7	5.1	1.7	1.3	0.3	2.5	-0.3	--
		2005	2006	2007	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08
Current account balance [5.8]	Bn. EUR	15.5	-3.9	25.5	-7.2	-7.9	7.5	-15.3	--	--
Direct investment (net) [5.9]	Bn. EUR	-216.4	-144.7	-94.8	-20.0	-29.9	-20.0	-18.8	--	--
Portfolio investment (net) [5.10]	Bn. EUR	131.4	266.3	253.9	-10.1	49.3	19.4	1.3	--	--
6 Prices		2005	2006	2007	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08
HICP [6.1]	yoy % ch	2.2	2.2	2.1	3.1	3.2	3.3	3.6	3.3	--
Core HICP [6.2]	yoy % ch	1.5	1.5	2.0	2.3	2.3	2.4	2.7	2.4	--
Producer prices [6.3]	yoy % ch	3.5	4.4	2.6	4.4	5.0	5.4	5.7	--	--
Import prices[6.4]	Index	104.8	112.9	105.2	118.9	122.4	122.7	--	--	--
7 Monetary and financial indicators		2005	2006	2007	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08
Interest rate (3 months) [7.1]	% p.a.	2.1	2.9	3.9	4.8	4.5	4.4	4.6	4.8	--
Bond yield (10 years) [7.2]	% p.a.	3.4	3.8	4.2	4.2	4.0	4.0	3.8	4.1	--
ECB repo rate [7.3]	% p.a.	2.0	2.8	3.8	4.0	4.0	4.0	4.0	4.0	--
Stock markets [7.4]	Index	3207.1	3793.3	4316.4	4386.4	4025.8	3776.6	3595.9	3768.1	--
M3 [7.5]	yoy % ch	7.4	8.5	11.1	11.5	11.6	11.3	10.1	10.6	--
Credit to private sector (loans) [7.6]	yoy % ch	8.1	11.0	10.8	11.2	11.1	10.9	10.8	10.6	--
Exchange rate USD/EUR [7.7]	Value	1.24	1.26	1.37	1.46	1.47	1.47	1.55	1.58	--
Nominal effective exchange rate [7.8]	Index	109.0	110.9	115.7	119.9	120.7	120.6	124.2	126.7	125.6

Number	Indicator	Note	Source
1	**Output**		
1.1	Industrial confidence indicator	Industry survey, average of balances to replies on production expectations, order books, and stocks (the latter with inverted sign)	ECFIN
1.2	Industrial production	Volume, excluding construction, wda	Eurostat
1.3	Gross domestic product	Volume (1995), seasonally adjusted	Eurostat
2	**Private consumption**		
2.1	Consumer confidence indicator	Consumer survey, average of balances to replies on four questions (financial and economic situation, unemployment, savings over next 12 months)	ECFIN
2.2	Retail sales	Volume, excluding motor vehicles, wda	Eurostat
2.3	Private consumption	Volume (1995 prices), seasonally adjusted	Eurostat
3	**Investment**		
3.1	Capacity utilisation	In percent of full capacity, manufacturing, seasonally adjusted, survey data (collected in each January, April, July and October).	ECFIN
3.2	Gross fixed capital formation	Volume (1995 prices), seasonally adjusted	Eurostat
3.3	Change in stocks	In percent of GDP, volume (1995 prices), seasonally adjusted	Eurostat
4	**Labour market**		
4.1	Unemployment	In percent of total workforce, ILO definition, seasonally adjusted	Eurostat
4.2	Employment	Total employment, domestic concept, seasonally and working day adjusted	Eurostat
4.3	Shortage of labour	Percent of firms in the manufacturing sector reporting a shortage of labour (unfilled job openings) as a constraint to production, seasonally adjusted	ECFIN
4.4	Wages	Wages and salaries. Labour cost index, industry and services (excluding public administration), nominal, working day adjusted	ECFIN
5	**International transactions**		
5.1	Export order books	Industry survey; balance of positive and negative replies, seasonally adjusted	ECFIN
5.2	World trade	Volume, 1998=100, seasonally adjusted	CPB
5.3	Exports of goods	Bn. EUR, excluding intra euro-area trade, fob	Eurostat
5.4	Imports of goods	Bn. EUR, excluding intra euro-area trade, cif	Eurostat
5.5	Trade balance	Bn. EUR, excluding intra euro-area trade, fob-cif	Eurostat
5.6	Exports of goods and services	Volume (1995 prices), including intra euro-area trade, seasonally adjusted	Eurostat
5.7	Imports of goods and services	Volume (1995 prices), including intra euro-area trade, seasonally adjusted	Eurostat
5.8	Current account balance	Bn. EUR, excluding intra euro-area transactions; before 1997 partly estimated	ECB
5.9	Direct investment	(net) Bn. EUR, excluding intra euro-area transactions	ECB
5.10	Portfolio investment	(net) Bn. EUR, excluding intra euro-area transactions	ECB
6	**Prices**		
6.1	HICP	Harmonised index of consumer prices	Eurostat
6.2	Core HICP	Harmonised index of consumer prices, excluding energy and unprocessed food	Eurostat
6.3	Producer prices	Without construction	Eurostat
6.4	Import prices	Import unit value index for goods, 2000=100	Eurostat
7	**Monetary and financial indicators**		
7.1	Interest rate	Percent p.a., 3-month interbank money market rate, period averages	Ecowin
7.2	Bond yield	Percent p.a., 10-year government bond yields, lowest level prevailing in the euro area, period averages	Ecowin
7.3	ECB repo rate	Percent p.a., minimum bid rate of the ECB, end of period	Ecowin
7.4	Stock markets	DJ Euro STOXX50 index, period averages	Ecowin
7.5	M3	Seasonally adjusted moving average moving average (3 last months)	ECB
7.6	Credit to private sector (loans)	MFI loans to euro-area residents excluding MFIs and general government, monthly values: month end values, annual values: annual averages	ECB

7.7	Exchange rate USD/EUR	Period averages	ECB
7.8	Nominal effective exchange rate	Against 13 other industrialised countries, double export weighted, 1995 = 100, increase (decrease): appreciation (depreciation)	ECFIN

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KC-AK-08-002-EN-C